EDUCATIONAL SCREEN

MAR 20 1940

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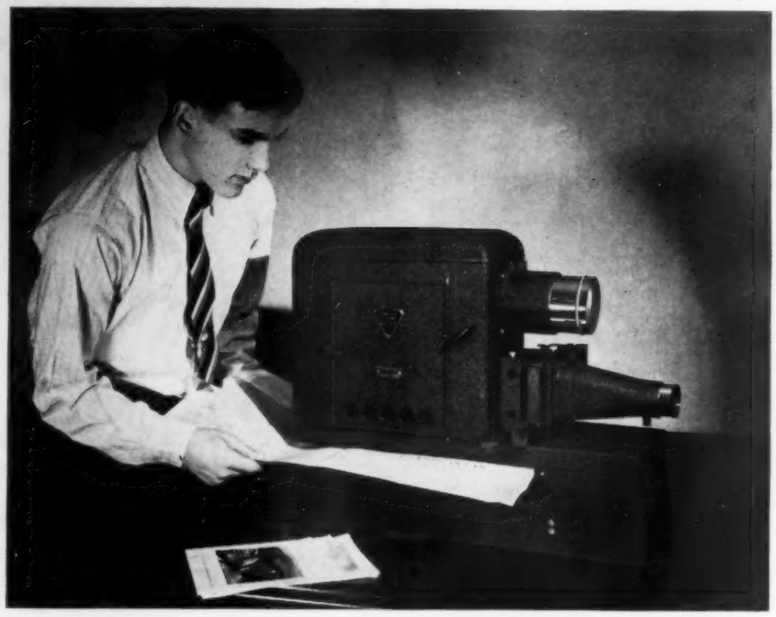

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Diversitorials

The St. Louis Meeting

THE St. Louis meeting of the D.V.I., ably planned and conducted by President J. E. Hansen and Secretary Camilla Best, was a distinct success, marked by good attendance, lively interest, and an almost unparalleled mass of utterance. Very little program time was used in showing pictures, with the consequent footage in papers, speeches and discussions reaching record proportions. Therefore, in undertaking to reprint the "proceedings" in our pages, we are met with extraordinary demands upon our limited space.

Something over half the material appears on pages 101 to 114 of this issue; the balance must await the April issue. This balance will include the following papers or rescripts—*The Teaching Film as a Classroom* Aid by Mrs. Alma B. Rogers, *Producing the Educational Sound Film* by V. C. Arnspiger, *How to Use the Sound Film in the Classroom* by Ruth Livermon, *Local Production of Motion Pictures to Supplement Professional Production* by Wm. F. Kruse, *Progress Report on the D.V.I. Yearbook* by F. Dean McClusky, a panel discussion on *Where Are We Headed in Visual Instruction* conducted by Edgar Dale, *Standards in Visual Instruction* by W. M. Gregory, *Classroom Facilities* by S. B. Zisman, and *The Status and Future of School-made Public Relations Films* by Wm. S. Hart and Godfrey Elliott. Only one address from the program will be missing from these proceedings—a resumé of "Materials of Instruction" by Herbert Jensen, who preferred to have his paper printed elsewhere. Despite this single exception, our total reprint in the March and April issues represents, we believe, the most nearly complete "proceedings" ever published on an annual meeting of the Department of Visual Instruction of the N.E.A.

An Omission in This Issue

BECAUSE of the extended reprinting of the St. Louis meeting we have been regretfully forced to omit, for this issue, the regular monthly insertion of Arthur E. Krows' definitive history of the non-theatrical field, "Motion Pictures—Not for the Theatre." It is the first break in 17 consecutive installments of this unique history, and it will be resumed in April if possible, in May at latest.

The Midwestern Forum

THE second annual meeting of the Midwestern Forum on Visual Teaching Aids will take place at the Hotel Morrison in Chicago on April 5th and 6th next. (The full program is printed on page 124 of this issue). This second meeting is being held because the first, in the Spring of 1939, was so markedly worthwhile. The attendance last year exceeded expectations, and there is every prospect that the 1940 session will eclipse the former figure. Continuity of management and policy is a decided factor in this growing success. Practically the same Committee, with many notable additions, is functioning for the second meeting, with William C. Reavis, Department of Education, University of Chicago, as the present Chairman, succeeding Donald Bean, University of Chicago Press, whose able handling of the first meeting gave the enterprise its auspicious start.

The coming program will offer all the outstanding features of last year's meeting—Demonstration Clinics for Elementary School, High School and College, a Round Table discussion for Directors of Visual Instruction, general sessions with authoritative addresses on various problems of the field—plus far more attention to the use of still pictures, more discussion from the floor, a dinner without "speeches," and a full evening devoted solely to presentation of recordings, still pictures, motion pictures and slides.

For maximum interest in and benefit from the coming Forum, all attending, either for the first or second time, would do well to read or reread the "full proceedings" of the 1939 Forum. It will afford an interesting basis for comparison of values of the two meetings and for a check on progress and improvement in the space of one short year. It should be easy to beg or borrow a copy of the 80-page "Full Proceedings of the Midwestern Forum of 1939" (many copies have been widely circulated), published by The EDUCATIONAL SCREEN at the *actual cost* price of 50 cents. Or, if all else fails, there are still a few copies available from us, postpaid, at the original figure.

Because last year's Forum was one of the livest and meatiest sessions we ever attended on visual instruction, because the Forum this April bids fair to surpass it in all respects, we can, with a clear conscience, urge upon all our readers everywhere to make their plans to attend—and then hold to those plans.

Again we are gathering completest possible data on all summer courses in visual instruction, for publication in April and May next.

Any reader knowing of such courses to be given next summer is earnestly asked to send us names of the institutions—with or without further data such as title of course, name of instructor, dates of duration, credits allowed, contents of course, etc. N. L. G.

Film Evaluation Project

AT THE start we anticipated possible difficulty in securing enough judges to make the Evaluation Committee of a size adequate for reliable results. Our fears were unfounded. Numerically the Committee is already beyond the dimensions needed, but some members are scoring very few films a year. Obviously a further step can be taken to the distinct advantage of the Film Evaluation Project.

We shall now aim at a permanent Committee of 500 teachers, each of whom will score not less than 10 films per semester, and a majority of whom will score a greater number. Limiting the Committee personnel is not only sound economy. We have found that the more films scored, the better the critical judgment becomes. More films can be scored only by teachers who use

(*Concluded on page* 114)

Standards of Geographical Film for Instruction

A searching analysis of elements and qualities, the desirable and the undesirable, in motion pictures planned for the teaching of geography.

W. M. GREGORY, Director
Educational Museum of Cleveland Schools

PROOFS of the general and specific instructional value of motion picture films have been obtained by classroom tests. Freeman, Davis, Knowlton, Gatto, Hansen, Arnspiger, and many others have conducted extensive tests to ascertain the value of certain films in instruction. These tests are as reliable as scientific controls can devise and are valid proofs that a certain film has educational value for specific purposes. *But we must not commit the serious error of accepting these tests as a blanket proof of the general educational value of all films so that they "may be shown when received" for any worthwhile instruction.*

I. Standards Needed for Geographical Films

The present mass of so-called educational and advertising films is a distinct menace to progress in the use of the film as an educational tool. Many films are not evaluated by the teacher but are used under the impression that films have in general some instructional value. This present situation is confusing and the poor results in instruction are misleading as to the real value of a high standard film as an educational tool. If films are to be used for instruction they should be selected with careful discrimination based on close attention to those professional standards which enable the classroom teacher to make definite and specific use of this tool in particular units.

In geographical instruction the film is a tool that brings facts and ideas to the pupils that would be otherwise unobtainable. *These films should meet the professional standards of geographical correctness and suitability for various grade levels. They should emphasize man as the center of a geographical environment.*

The clever artificial deceptions of Hollywood are ruled out of all geographical films which must present a truthful visual impression of man's activities in a natural environment. The educational value of the one reel "commercials" or theatricals varies so widely that each reel should be judged on its merits. In these films good photography often prevails but there too frequently is undue emphasis on the bizarre, queer habits, freaks, crudity, etc. *Switzerland—The Beautiful* in color is excellent geographical material.

The documentary film tries to dramatize facts in the geographical field as *Nanook of the North, Moana, Man of Aran* and *Elephant Boy.* These examples are fine interpretations of life in a natural environment and have no propaganda subtleties. The geographical conditions are more highly dramatized in such subjects as *The Plow that Broke the Plains,* which hands out the idea of dustbowls caused by wheat growing and now requiring a conservation program. Another geographical problem in soil conservation has been dramatized and almost set to music in *The River.*

Sometimes the documentary technique produces a vivid and artistic mixture of gears, rods, whirling crankshafts, high chimneys, rapidly moving wheels and music which arouse vague unintelligent emotions but give no true ideas of man in industry. This type of film needs careful selection for use in the classroom.

If the documentary film uses its power to make known *critical geographical facts* it should be selected as a definite part of training for citizenship. "The City" is a presentation of the geographical growth and activity within a great metropolis. It is useful in dramatizing the problems of man's urban development.

II. Standards for the Producer and for the Classroom Teacher

First and most important is some guidance for the producer who realizes that to succeed his films must be excellent tools for instruction. Detailed standards for instructional geographical films should be formulated by the close cooperation of the producer and his staff; a geographical expert who fully comprehends the needs of the classroom; and a teacher who works with films and uses them with a modern technique. Such standards should be in sufficient detail to guide the producer in meeting all the requirements of modern geographical instruction and the resulting films should be so closely adjusted to the courses that they become integral parts of important units of instruction.

The field of production should be chosen for those units of geographical instruction which require techniques for their understanding. The most promising field to the producer is elementary school geography to which the motion picture can bring laboratory material for observation and rich experiences. The unusual, the spectacular, and wonderful are of the older type of geography which has been superseded by the visual presentation of man at work and how he lives and moves from place to place on the earth. The units are selected as typical of the ways in which man lives and works. Each small unit of film should bring interesting experience to the pupil.

In the elementary school the presence of mixed social studies, integrated courses, "core" subjects, and progressive procedures too often confuses the real purpose of giving experience to pupils. In many schools geography and history are presented as related but separated fields in the social studies. As a result a continuity of geography units at various learning

A scene from the Erpi film "Irrigation Farming"

levels is commonly found. One serious mistake of the producer is trying to provide material and ideas that are too extensive and over dramatized. Such films without a continuity as to man's labor and its results are pointless and valueless as educational tools. Again too many films in geography deal almost entirely with man's physical environment and not at all with his use of it. Such a treatment is not according to modern interpretation of geography.

The clearness with which the producer follows the standards required, the more educational value he can build into films. The standards for producers are so important as to demand more discussion than this space permits. However in passing, attention is called to the fact that the success or failure of a producer's is due to his skill in getting the high standards in organization of the material which he produces.

Standards for Selection of Geographical Film for Instruction

To guide the classroom instruction in the selection of film is an important item in any progressive program. Teachers are trying to develop definite worthwhile instruction with films and it is for their guidance that clear standards should be established.

The present lack of such standards and the idea that any film that is put together may be used for any grade level at any time is the present weakness in the application of films to geographical instruction. One good film applied correctly is superior to many that have little relation to the lesson content. *Each film must be evaluated by the teacher as to its content and the level of learning before it is used.* This is not an impossible task and it is necessary to assure correct and successful techniques on the teacher's part. Repeat showings of films by the same teacher throughout several semesters is a clear indication that these films are a definite part of her program of instruction.

A study of the circulation of geographical films in several of the many film libraries of this country would indicate those films most used at certain levels of learning. A nation-wide check-list like that being conducted by the "Educational Screen" reveals the films most used in various grades and units.

It is from the consideration of such source of information and many experiments with films in classrooms that the writer makes some attempt to formulate some suggestive standards that may guide teachers in their selection of geographical films.

III. Films Made for Various Learning Levels

Learning levels are more clearly understood since P.L.R.'s have been determined for large pupil groups. This knowledge of the pupil's capacity for learning has made possible a close correlation of subject matter to pupil's abilities in the modern school. The P.L.R.'s of pupils give teachers a clue as to the ideas that classes can take and use. Many teachers have been slow to adjust the subject matter to pupil's abilities. This is the producers most serious problem. Teachers at first used any film subject with any class but this was in those brief days of the first wonderful movies when educational authorities seemed dazed by the celluloids. In the modern classroom it is necessary to select the film as to specific subject and as to learning level based upon the capability of the student.

It must be remembered, however, that the ease of the film as a medium of communication makes possible the clear presentation of concepts which ordinarily have been considered "too difficult" or "too complex" to be used at established learning levels. In the selection of films the teacher should not fall into the error of underestimating the ability of pupils to comprehend facts clearly presented simply because pupils are low in reading ability.

Ability to learn through the picture is much more easily acquired than learning through reading. Growth in this ability seems to follow fairly well defined steps which may be outlined somewhat as follows:

(1) The clear recognition of single objects is the basis for geographical ideas. Such simple scenes as cows in pastures, ducks on the water, dogs on a farm, Eskimo huskies pulling a sled, horses at work, men cutting trees give simple basic basic concepts for elementary geography combining both physical and cultural environment.

(2) The recognition of activities in their natural settings in such films as *A Day on the Farm* and *Farm Animals* offers opportunity for simple observations and interpretations.

(3) *Wheat Farmer, Wisconsin Dairies, Clothing* and *Transportation on Great Lakes* offer material for observation and interpretation of simple geographical activities.

(4) A recognition of simple types of man's adjustment to his physical environment as *Fall, Winter, Spring, and Summer on an English Farm, The Truck Farmer, Market Gardening, Irrigation, Peru, Panama Canal, Land of Mexico.*

(5) Recognition of the complex activities of man in relation to many elements of his environment. Some of the following are suggested as being in this level of complex relationships: *Development of Transportation, Water Power, Germany—Industries.*

IV. Details of Standards for Geographical Films

The Title

It should be axiomatic that the geographical film is exactly titled as to its contents. Smart cracks, word plays, dull generalities are taboo as titles for school films in geography or other subjects. "Geography of North America" is adapted to a large group of film subjects and not suitable for one reel.

The title *Lumbering in the Pacific Northwest* is a

(*Continued on page* 120)

A Study of the Comparative Effectiveness of Three Methods of Using Motion Pictures in Teaching (II)

A carefully controlled study of classroom values of sound films with results conducive to further research.

JOHN ELMORE HANSEN
Bureau of Visual Instruction
University of Wisconsin, Madison

Chapter IV

Results

THE results of the two parts of the study are summarized in the following chapter. First are given the mean scores for the two tests on each of the films, the mean gains, the differences in gains, and the standard errors of the differences. These are followed by a brief statement regarding the significances of the differences in gains between the three groups.

TABLE II

Mean Scores and Standard Deviations for Groups A, B, and C on Pre-tests and Final Tests; the Gains between Tests: the Differences in Gains between Groups; and the Standard Errors of the Difference for the First Part of the Experiment.

	Test 1 Averages	*Test 2 Averages*	*Tests 2-1 Averages*	*Difference in Gains*	*S.D. of Diff.*
Plant Growth					
Group A	68.42	81.18	12.75	A-B=2.71	1.298
SD (dis)	10.12	7.504	7.79		
SD (av.)	1.31	.977	1.014		
Group B	70.76	80.80	10.04		
SD (dis)	8.425	6.89	6.15		
SD (av.)	1.02	.835	.747		
Group C	70.16	84.15	12.99	C-A= .24	1.333
SD (dis)	9.830	7.310	7.22	C-B=2.95	1.150
SD (av.)	1.19	.886	.875		
Plant Roots					
Group A	64.95	79.81	14.85		
SD (dis)	7.70	7.705	8.03		
SD (av.)	1.00	1.003	1.045		
Group B	65.94	82.47	16.47	B-A=1.62	1.345
SD (dis)	8.23	7.105	6.995		
SD (av.)	.998	.861	.848		
Group C	62.04	80.82	18.78	C-A=3.93	1.434
SD (dis)	9.166	7.510	8.112	C-B=2.31	1.298
SD (av.)	1.11	.910	.983		
Leaves					
Group A	78.09	83.95	5.86		
SD (dis)	8.575	7.64	4.510		
SD (av.)	1.11	.994	.588		
Group B	76.28	83.75	7.47	B-A=1.61	.802
SD (dis)	10.28	9.155	4.810	B-C= .19	.789
SD (av.)	1.24	1.11	.583		
Group C	75.87	83.15	7.28	C-A=1.42	.793
SD (dis)	9.901	9.370	4.395		
SD (av.)	1.20	1.13	.533		
Flowers at Work					
Group A	73.66	80.22	6.56		
SD (dis)	7.828	6.503	5.465		
SD (av.)	1.019	.846	.711		
Group B	74.38	82.35	7.98	B-A=1.41	.942
SD (dis)	8.720	8.585	5.120		
SD (av.)	1.058	1.04	.620		
Group C	70.12	79.59	9.47	C-A=2.90	1.028
SD (dis)	10.34	9.045	6.130	C-B=1.49	.967
SD (av.)	1.25	1.09	.744		

As will be noted from the above summaries, the mean gains for Group A and the four films, *Plant Growth, Plant Roots, Leaves,* and *Flowers at Work* were 12.75, 14.85, 5.86, and 6.56, respectively; for Group B 10.04, 16.47, 7.47, and 7.98 respectively; and for Group C 12.99, 18.78, 7.28 and 9.47 respectively. These gains are all statistically significant.

On the first film Group C gained more than either Groups A or B, while Group A gained more than Group B. On the second film Group C gained more than either Groups A or B, while Group B gained more than Group A. On the third film Group B gained more than either Groups A or C, while group C gained more than Group A. Of these various differences none can be said to be statistically significant. However, the consistency of Group C in gaining more than Group A on all four films and more than Group B on three of the four would seem to indicate a trend in favor of this group and method. The fact that Group B outgained Group A on three of the four films would seem to have some, though less, meaning.

TABLE III

Mean Scores and Standard Deviations for Groups A, B, and C on the Pre-tests and Final Tests; the Gains between Tests; the Differences in Gains between Groups; and the Standard Errors of the Differences for the Second Part of the study.

	Test 1 Averages	*Test 2 Averages*	*Tests 2-1 Averages*	*Difference in Gains*	*S.D. of Diff.*
The Green Plant					
Group A	83.09	87.72	4.63		
SD (dis)	8.075	8.990	3.475		
SD (av.)	1.05	1.17	.452		
Group B	83.01	88.12	5.11	B-A= .48	.714
SD (dis)	8.926	7.885	4.57		
SD (av.)	1.08	.956	.554		
Group C	81.59	88.87	7.28	C-A=2.65	.756
SD (dis)	8.755	7.405	5.003	C-B=2.18	.823
SD (av.)	1.06	.898	.606		
Flower to Fruit					
Group A	74.09	79.46	5.37		
SD (dis)	6.910	7.790	4.76		
SD (av.)	.899	1.01	.619		
Group B	75.93	82.56	6.63	B-A=1.27	.813
SD (dis)	8.080	7.095	4.10		
SD (av.)	.979	.860	.498		
Group C	74.88	82.37	7.48	C-A=2.12	.886
SD (dis)	9.030	8.065	5.245	C-B= .85	.825
SD (av.)	1.09	.980	.636		

The mean gains for Group A on the two silent films, *The Green Plant* and *Flowers to Fruit* were 4.63 and

5.37 respectively; for Group B, 5.11 and 6.63 respectively; and for Group C, 7.28 and 7.48 respectively. On both films Group C gained more than either Group A or Group B, and Group B gained more than Group A.

The gain made by Group C over that made by Group A on the first film is more than three times the standard error of the difference and therefore may be considered statistically significant. The gain made by Group C over that of Group A on the second film, although not quite so large, is nearly two and one half times the standard error of the difference and may also be considered statistically significant. Group B made greater gains than Group A on both films but the differences cannot be considered significant.

From the above results for Part I of the study it will be noted that Group C (Group taught by the talking pictures in which the mechanically recorded voice presented all of the verbal explanation during both showings of each film) made substantially greater gains than Group A (Group taught by motion pictures in which the classroom teacher asked questions and directed the pupil discussion during both showings of each film). Group C also outgained Group B (Group taught by motion pictures in which mechanically reproduced voice was used with first showing and teacher questioning and pupil discussion with second showing of each film) on three of the four films. On the fourth film there was little difference between these groups. Group B outgained Group A on three films while Group A outgained Group B on one film. In brief, Group C made the greatest gains, Group B ranked second, and Group A, made the lowest gains.

On Part II of the study the trend was in the same direction, only more pronounced. Here Group C clearly outgained both Groups B and A, while Group B outgained Group A.

Chapter V

Conclusions

As indicated in the statement of the purpose of the study reported herein the writer desired to determine the relative effectiveness of three different methods of using instructional films (1) in helping pupils to gain factual information presented in the films and (2) in helping them to comprehend subsequent similar situations which might confront them. The results of this study seem to indicate that the last method, that employed with Group C, in which the formal verbal continuity which has been prepared by the producers as an integral part of the sound motion picture is used, is more effective than that employed with Group A, in which an accompaniment directed by the teacher and consisting of teacher-pupil questions and discussions is used. This method in which both presentations of each film were accompanied by the regular sound continuity also seems more effective than the method employed with Group B, in which only the first showing was accompanied by the fixed verbal continuity while the second showing had the sound shut off and a discussion and questions led by the regular classroom teacher substituted.

The method employed with Group A in which the regular verbal or sound continuity was shut off in both showings and teacher-pupil discussion substituted proved in this study to be the least effective of the three methods in aiding pupils to acquire factual information from films. It might seem that the method of film presentation in which the pupils are actively participating in discussing the scenes as they appear on the screen would be more effective than the method in which all explanations are offered through the mechanical reproduction of a synchronized voice, but such does not seem to be the case.

Even more inconsistent with the generally accepted ideas regarding learning are the results of the second part of the study. In this part of the study the writer attempted to discover whether there was any difference in the effectiveness of the three methods employed in the first part of the study in making knowledge thus gained available for subsequent use in solving new problems. Since the acquisition of factual information is of little value unless it results in the development of generalizations or concepts which are part of the pupil's thinking equipment and thus facilitates the transfer of training, it is essential that learning be of such a nature that it can be used. The results of this study seem to indicate that the fixed verbal continuity of the talking motion picture is more effective than either of the other two methods employed in accomplishing this. Apparently there is genuinely active pupil participation even though they are listening quietly to a spoken continuity while viewing the picture on the screen.

More marked than the difference in gains between the three groups is the size of the gains made by all of the groups. It must be borne in mind that the pupils had just completed the study of most of the subject matter covered by the motion pictures, that they had been taught by a staff of well trained and experienced teachers of biology and that the laboratory and other facilities provided in this school were better than those of the average school; yet all of the groups made large gains. Probably the most striking evidence furnished by this study is that the motion picture is a very effective aid to learning regardless of the particular method used in presenting it and that, although the teaching methods used do make a difference, apparently the most important factor in teaching with motion pictures is a good pictorial presentation.

The writer does not recommend that the results of this study be accepted as conclusive evidence. This study, or variations of it, ought to be repeated by others. Since the talking and sound motion pictures are proving themselves to be valuable instruction aids more consideration should be given to their construction, especially to the accompanying verbal explanation and other sound effects. Experimentation with the form of the spoken continuity is especially important. Instead of the formal explanation which accompanies most of the present talking pictures a more challenging and thought provoking form of spoken continuity should be considered. Much experimental work needs to be done here.

School-Made Motion Pictures For Public Relations in Ohio (III)

Concluding installment summarizing types of school-produced films and community reaction to them.

WILLIAM S. WAGNER
Montpelier, Ohio, Public Schools

Chapter VI

Content of Films

OBVIOUSLY, the best method of discovering the content of the films produced by the thirty-four schools reporting, would be to see them projected. For the purposes of this study, however, each school was asked to outline briefly the content of its films. From the outlines submitted, it was possible to determine broad classifications of types of pictures produced, and to compare these classified types on the basis of the amount of projection time devoted to each. Table II presents eight broad classifications—the number of schools having each type of picture, and the projection time of each classification.

Table II Classification of Films and Their Projection Time

Classification of films	Number of Schools Having	Total projection time in Minutes
General school activities	27	1419
Football	9	141
Public service	1	98
Safety	2	76
Community	3	74
Instructional	2	44
May Day	3	32
Teacher selection	1	6
Total minutes of projection time		1890

From Table II it is obvious that the general school activities type of picture dominates. This type of picture is well illustrated by the following outline.

A Day in the Euclid Schools

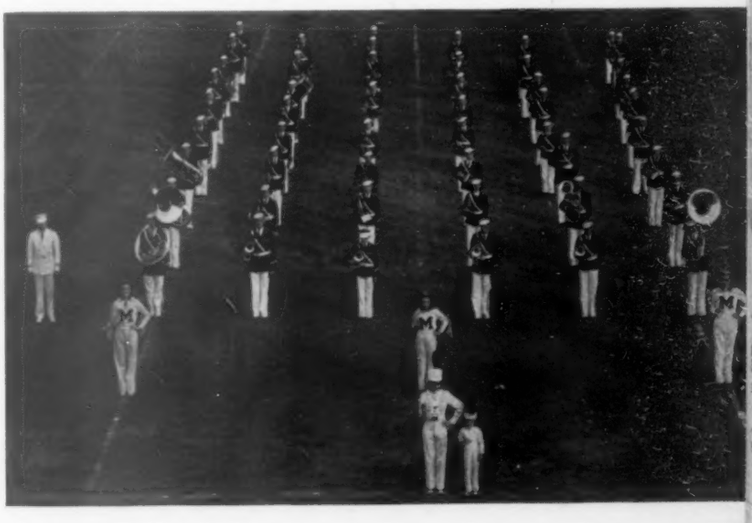
Scene 1 Short shot of children leaving home—mother on steps.
Scene 2 Short shot of another home with children leaving for school.
Scene 3 Traffic crossing with police assisting children across the street.
Scene 4 School safety patrol aiding students cross street.
Scene 5 Students unloading from buses.
Scene 6 Large group of elementary children going into the school building.
Scene 7 Large group of high school students going into the school building.
Scene 8 Shot of little boy carrying books for little girl.
Scene 9 Shot of high school boy carrying books for high school girl.
Scene 10 Nursery school room.
Scene 11 Kindergarten room.
Scene 12 First grade room.
Scene 13 Fourth grade room.
Scene 14 Elementary—sixth grade room.
Scene 15 Elementary students in library.
Scene 16 Elementary students in shop.
Scene 17 Elementary students in the gym.
Scene 18 Elementary students in assembly program—dramatic production.

High School

Scene 1 Students in corridors changing classes.
Scene 2 Commercial department.
Scene 3 Industrial arts department.
Scene 4 Home economics department.
Scene 5 Art department.
Scene 6 Library.
Scene 7 Dramatics.
Scene 8 Science laboratory.
Scene 9 A Social Science class showing an integrated program.
Scene 10 High school orchestra.
Scene 11 High school choral group.
Scene 12 High school bands.
Scene 13 High school physical education classes.
Scene 14 On the field—
a. Football
b. Track
c. Baseball
d. Hockey
e. Tennis
Scene 15 On the floor—
a. Basketball
b. Volleyball
c. Badminton
d. Tumbling
Scene 16 Guidance—
a. Conference room counselling
b. Clubs
c. Student aid
d. Big sister talking to little sister
e Big brother talking to little brother
f. Employment bureau
g. Entering college
Scene 17 A flag blowing with a boy and a girl on each side of it. Fade-out.

The outline of the Euclid schools motion picture presents a rather complete account of the contents of their picture, which is 1600 feet in length, and taken

The high school band



A high school class in Home Economics

on 16 mm. silent film. The remaining twenty-six schools with pictures of this type presented outlines which were, on the whole, not as complete as the one included above. However, any outline which included a combination of activities of the school was classified as a general school activities picture.

Football Film. While football and other athletic activities are included in many of the general school activities type picture, there are, however, nine films devoted entirely to football. Obviously, football and other athletic events are challenging photographic subjects. However, there may be some doubt as to the public relations value derived from an entire picture devoted to this activity.

Public Service Films. Only one school reported making this type of film, presenting the public service activities of the community, such as sewage disposal, water supply, etc.

Safety Films. The following material from the Cuyahoga Falls report on this type of film may serve as a description. "Illustrates correct street crossing—danger of playing in street—correct and incorrect driv ing—fire drills, etc."

Community Film. This type of film is difficult to classify. It includes shots of local people, local community activities, and local points of interest.

Instructional Films. In this classification are the films produced to aid teaching of a specific area of subject matter. The pictures included under "social service" and "community" might also be termed instructional as they were used in the civics classes as well as for public relations.

A shop class studying farm machinery

May Day Films. Three schools have short pictures showing the activities of May Day.

Teacher Selection Film. One six-minute film on teacher selection was made in Galion. The outline of this film is included here.

How Teachers Are Selected

I. The need for an additional teacher manifests itself.
II. The superintendent is made aware of the fact.
III. The superintendent writes for credentials of applicants whose applications he already has on file; he selects several most promising and writes them for interviews.
IV. One applicant is shown appearing for interview.
V. The superintendent writes the applicant notifying her she has been hired.

Chapter VII
Public Relations Value of Motion Pictures

How many times and to approximately how many people has your picture been shown? This question was answered by thirty-one schools. The totals show fifty-six pictures, exhibited 1,439 times to 211,650 people. It is not known how many of these were school pupils, but it is certain that significant numbers of school patrons attended the showings.

Twenty-nine schools replied to the question regarding the drawing-power of these films, four saying attendance was normal, eleven saying greater, and fourteen saying much greater. It would seem logical to conclude that the school-made motion picture has more drawing power than the usual school-community type meeting. The writer, when interviewing eight of the men having programs, was told usually that attendance was at times doubled, and always greater when school pictures were on the program of a meeting.

An attempt was made to discover the effectiveness of the film programs in developing better public relations. Some of the typical remarks of patrons are particularly revealing, and for this reason they are included here:

"I didn't know we had those departments in our school."

"This is one of the best things that the school has done to acquaint the patrons of the school with the operation of the school."

"I did not know you were doing all those things at school."

"I don't see how you are able to manage so many kids so efficiently."

"My, I wish my children could attend your school."

In addition to this are the comments made by the school staff members who exhibited the school films:

"Constant call by public for showings."

"Parents more willing or anxious to have special departments expanded."

"Comments by local papers."

"Demand for tickets."

"Cooperation of board members and superintendent."

"Increased enrollment in school."

"Requests for repeat showings."

"Shown to residents just before voting on renewal of 3 mill levy for operating, which was passed."

"Film stimulated interest on the part of patrons in the work of the schools."

(*Concluded on page* 128)

Proceedings of the Winter Meeting of the Department of Visual Instruction of the National Education Association*

(Held in St. Louis, February 27 and 28, 1940)

Directing the Visual Instruction Program

The Statewide Program

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IN keeping with its general program for the improvement of instruction, Louisiana is making a serious effort to bring into classroom use on a State-wide basis the newer devices classed under "perceptual aids" to teaching.

Louisiana's visual instruction program grew out of a State-wide curriculum study initiated during the spring of 1936. At that time, a conference of the staff of Teachers College of Louisiana State University and members of the State Department of Education was held to discuss plans for a State-wide study of curriculum. As a result of this conference a class was organized under direction of Dr. E. B. Robert, Dean-elect of Teachers College of Louisiana State University, and Mr. A. M. Hopper, State Supervisor of Elementary Schools and State Director of "Program for the Improvement of Instruction." This class consisted of about 50 members, including members of the University staff and other colleges, members of the State Department of Education, Parish (County) superintendents, supervisors, principals, and teachers. The program worked out during the summer of 1936 at Louisiana State University has been expanded and continued. During the early stages of the curriculum movement, it was found that instruction in the schools of the State could be greatly improved if more and better use were made of the many types of perceptual aids, including the school journey, objects, specimens, models, the school museum, graphs, charts, maps, globes, photographs, prints, the stereograph, the glass and film slide, and the motion picture. The possibilities of enriching instruction through increased use of sound aids such as the phonograph record and the radio were also considered. It was believed that an intensive study should be made to determine how these aids could be more profitably used in classroom instruction. Accordingly a State Committee on Visual Education was appointed to make an intensive study of the possibilities in the field of audio-visual education. It should be explained here that Louisiana's school system is well centralized. The parish (county) is the unit of school administration. The parish administrative units work in close co-ordination with the State Department of Education which serves as a service and co-ordinating agency for the local units. The State Committee consisted of representatives from the sixty-four parish school units and the three separate city systems that compose Louisiana's school system.

Questions of the following type were considered by the State Committee.

1. Are the schools of Louisiana making the most effective use possible of the illustrations which are found in many of our textbooks?
2. Are we supplementing illustrations in our textbooks with other illustrations that could be easily collected, classified, and used in connection with our teaching? (Geography and history are illustrative subjects that might be cited where a more extended use of pictures may be made.)
3. Are we using to their full possibilities, diagrams, maps, and charts, and other graphic materials which are available and can be made to supplement many phases of teaching?
4. Is there a possibility of using the camera to bring into the classroom many phases of local life which might serve to vitalize teaching?
5. What are the possibilities of using still pictures and lantern slides more effectively in teaching?
6. Do the silent and sound picture machines offer opportunities yet unrealized to make teaching more effective?
7. What opportunities does the radio offer to us as a device in teaching?
8. What effective steps should the State Committee take to bring before school officials and teachers the great possibilities of enriching instruction through a State-Wide visual instruction program?

The State Committee organized itself as a study group for the purpose of exploring all the possibilities of improving teaching and learning inherent in the field of audio-visual education; to examine the scientific studies that have been made in these fields; and to draw conclusions of its own as to the possibility of increasing the use of perceptual aids in teaching. The State Committee was organized as a nucleus to stimulate and co-ordinate a State-wide study in the field of visual education. The whole study program was directed by the writer.

Members of the State Committee served as advisers and directors to study further on a State-wide basis in the field of visual education. The colleges of Louisiana were represented on the Committee. The Louisiana Library Commission cooperated with the study program. It furnished bibliographies dealing with visual education and made available to the Committee members and to others interested references and materials dealing with the field. The libraries in the various colleges of the State also cooperated in the same manner.

Initiative on the part of individual teachers was emphasized. During the summer of 1937, courses in audio-visual education were offered in two institutions of higher learning. Practically all Louisiana colleges offered courses in this field during the summers of 1938 and 1939 and plan to continue to do so. The Extension Division of the Louisiana State University, which had an organized visual education library prior to the State-wide program, cooperated in every way to facilitate the expanded program.

The study program as briefly explained above was well received by the teachers of the State. The faculties in the various schools made an intensive study of the possibilities of increasing teaching effectiveness through increased use of visual and other perceptual aids. They learned to use mechanical devices essential to an effective program as these were purchased and installed in many schools of the State. The program was given impetus on October 17, 1939, by a resolution adopted by the State Board of Education establishing visual education libraries in six centers, including the following State institutions of higher learning: Louisiana State Normal College; Louisiana Polytechnic Institute; Southwestern Louisiana Institute; Southeastern Louisiana College; Southern University for Negroes. A center was also provided for in the State Department of Education. These film libraries were established in addition to the one at Louisiana State University which brought the total State film centers to seven. The administration of the visual education libraries was placed under the direction of the Directors of Extension in the State institutions. In the case of Southeastern Louisiana College, the administration of the library was placed under the direction of Dr. D. C. Martin, as this institution has no Extension Division. In each institution, the field work in the territory served by the institution was placed under the direction of some competent staff member of the institu-

*See Diversitorials, page 92.

tion. The Directors of the visual education libraries became permanent members of the State Committee on Visual Education, and the State program was modified so that each institution would plan its own program to serve its best interests and the best interests of the region in which the institution is located.

The State Committee agreed to plan a long-time program in Visual Education for Louisiana, with the view of making a continuous study of developments in the field and securing appropriations to be used in expanding the visual education program to serve the schools and colleges of the State. The representative of each institution on the Committee agreed to assume responsibility for developing with the entire faculty of his institution the State Program of Visual Education and the plan projected for using the State film libraries. With regard to films only, the following tentative program was worked out:

1. Each library center will make a list of the films that it chooses to purchase for its own use and region it serves, this list to be submittted to the State Department of Education.
2. Each institution should add free films to its film library after they have been previewed and accepted. Criteria should be set up for the judging of these films in order that undesirable propaganda and advertisement will not be shown in the schools.
3. Each institution should secure copies of the film catalogs of Louisiana State University, the University of Wisconsin, Ohio State University, and other institutions to study the organization of libraries in other centers.
4. Each institution should provide a room for the demonstration of films and other visual materials.
5. The State Department of Education will publish a general catalog giving the names of the films that are available in each film center in the State, and each institution will prepare a list of the films available in its library. This catalog and the lists will be made available to the schools of the State.
6. It was agreed that anv school in the State should feel free to draw from the library of any institution. but. in general, a school should draw from the institution located in its region.
7. It was agreed that each school borrowing from a film center should deposit $5.00 to cover the transportation of films to and from the school. All films will be made available to schools without cost but each school borrowing films is to pay for their transportation.
8. It was agreed that each institution would submit a minimum list of films for immediate purchase. Other films should be selected as soon as possible and listed with the State Department of Education for purchase.
9. It was agreed that, while films would be rental free to a school. the school would be held responsible for anv damage. It was agreed that $1.00 would be charged for each day that a school delayed the return of a sound film bevond the date agreed upon, and 50c would be charged for each day that a silent film is delayed beyond the date of its return.
10. The representatives of the institution agreed to submit further suggestions for the development of the Visual Education Program as experience is gained.
11. It was agreed that meetings would be called by the State Department of Education as needs would arise for committee consultation.

In relation to the State Program of Visual Education, it was felt that a continuous study of developments in the use of visual and auditory aids in teaching should be made. It was planned that each institution of higher learning would offer summer courses in this field in the immediate future and plan to offer courses in the regular session for the training of teachers. In other words, one of the first problems recognized in the program was teacher training in the use of visual and auditory aids. It was realized from the first that there is no separate field of visual education, but that the use of all types of perceptual aids in teaching should be an integral part of classroom instruction and a determined effort has been made to bring into actual use in the teacher-training programs wide application of recognized types of visual and auditory aids. As an example of this idea, the training schools of the State are attempting to bring into classroom use various types of perceptual aids in teaching so that student teachers will see actual demonstrations of how these function in teaching. A program has been projected whereby more extensive use will be made of various types of perceptual aids in the academic courses taught in the colleges of the State. All teachers, either in public schools or institutions of higher learning in the State, have access to the film libraries and other materials useful in enriching instruction through perceptual aids. Many librarians in the public schools and colleges of the State are cooperating. Librarians believe that in addition to the books, periodicals, and papers usually found in the library, visual materials of all kinds should be a part of the library service. It is recognized that audio-visual aids are, themselves, a kind of book—a talking book. The young people of today do not limit their search for information and ideas to books. Ideas and information from motion pictures, the radio, comic strips, advertising illustrations are part of their education, and it should be stated incidentally that audio-visual service is increasing the use of books.

In Lousiana it was recognized that certain problems had to be met wherever a serious attempt was being made to use audio-visual aids in teaching. Administrative problems, such as financing and setting up budgets for the purchase of visual materials, have to be solved. Other problems of a supervisory nature, such as the training of instructors in the use of equipment and the selection and use of audio-visual materials, are being studied by practically all the schools of the State. It is believed that a continous, organized study of these problems will result in a reasonably satisfactory solution of many of them.

The local administrative officers of the various parishes of Louisiana, especially the parish (county) superintendents and supervisors, have cooperated wholeheartedly. In several parishes, every school has been equipped with motion picture and other projectors to facilitate and increase the use of visual aids. In other parishes a few schools have been equipped and plans have been projected for the equipment of all schools as these schools become ready for the use of equipment and as finances permit.

As stated in the early part of this paper, the institutions of higher learning and the State Department have assumed responsibility for making available to the schools of the State educational films. As the program expands and appropriations are made, it is hoped that these centers will be able to make available visual materials of every type. Materials available in the centers named are supplied to schools of the State without cost. The State Board of Education has furnished money to stock these library centers.

In addition to the State film centers established and financed by the State Board of Education, local film centers have been established by local units. Especial mention should be made of the Visual Instruction Department in the City of New Orleans established and financed by the Orleans Parish School Board. Mrs. Camilla Best, Secretary-Treasurer of the Department of Visual Instruction, N. E. A. is Director of the Department of Visual Aids for the city school system of Orleans.

Much credit is due Superintendent Bauer and Mrs. Best for the impetus given to the Louisiana program. A modest film library has been established in New Orleans. Mrs. Best and her associates have developed an effective visual education program in New Orleans. Other parishes are developing local programs to co-ordinate with the State Program. The stimulation to Louisiana's program of Visual Instruction given by Mr. J. E. Hansen, Chief of the Bureau of Visual Instruction, University of Wisconsin, during the summer of 1938 through his class at Louisiana State University should not be overlooked.

In summarizing the following statements indicate the main features of the Louisiana Program:

1. It is a state program.
2. The program provides for the training of teachers in the use of visual aids.
3. The institutions of higher learning are actively cooperating in the development of the program.
4. Film libraries are being established so that all schools will be conveniently served.
5. The visual instruction program is a part of the State's general program for the improvement of instruction.

The City Program

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IN presenting this topic I shall first discuss the problem as it relates to my own school situation; then make some statements with regard to current practice throughout the nation; and conclude with some rather general observations as to what the current practice seems to be.

Any program to be successful must be well organized. Evansville, Indiana, is a city of 110,000 people with a public school population of 17,500 children. Of this number approximately 5,500 are in five secondary schools and 12,000 are enrolled in seventeen elementary schools. Heading the entire program of audio-visual instruction is the director. His office is located with that of the department directors and supervisors in the central administrative headquarters. He is assisted by a secretary in this office. Located at the Public Schools Warehouse is the general audio-visual library. Here there is a booking clerk who also fills orders and repairs damaged films and slides. Operating out of the library is the delivery clerk. A technician is employed part-time by the department to keep the projection equipment in operating condition.

In each of the schools one person is designated as school director of visual education. The school director in each of the high schools has a staff of trained student operators who are assigned by periods to teachers who have materials to be projected. This group in each school is being changed yearly by graduation. However, the list of applicants for jobs as projectionists outnumbers the vacancies. In the elementary schools the school director trains teachers in the use of equipment. In the beginning there was considerable fear and trembling on the part of many teachers who used the projectors. Much of this has been overcome, and many of the teachers are experienced as operators. As new teachers come in, the building director acquaints them with the materials available, how to secure them, and how to utilize them.

Each building is regarded as a separate unit, and projection equipment is supplied to each as such. A typical grade school is equipped with one 16 mm. sound projector, two or more stereopticons, two or more portable screens, and one opaque projector. In addition, nearly all of the rooms in the school are equipped with opaque shades and electrical outlets. In the high schools, in addition to the equipment mentioned, there is an additional 16 mm. sound projector, one 16 mm. silent projector, a public address system, one ten-foot theatre-type auditorium screen, several radios, and one recording machine. All of this equipment is in the charge of the school director. Every school has worked out a plan for informing teachers as to when equipment will be available. The most generally used device is a form which is placed on the bulletin board of the school office. This form divides each school day into periods and teachers sign for the period during the week which they want the equipment. In the elementary schools the custodians deliver the equipment and call for it when the teacher has completed using it. In the high schools this is done by the student operators.

Biennially a complete catalog of visual materials is published and is placed in the hands of every teacher. Materials are listed by subject areas, and the grade level as well as a description of the material is indicated. From time to time as coures of study are revised, available materials are listed therein by units. Numerous lists are issued from time to time of visual aids available from the State Health Department, from various government agencies, from the State University and from commercial and industrial organizations. From all of these, teachers make choices of materials which they want for classroom purposes. These are sent in by the various schools on requisitions to the booking clerk who clears conflicts and sends out orders. The delivery clerk makes a daily round of the buildings picking up and leaving orders on his schedule. Due to the size of the city he can conveniently reach all the schools in one day. Films and slides are circulated on a two-day basis. Exhibits and transcriptions are circulated on a four-day schedule.

The foregoing report has been largely on the mechanical aspects of the Evans-

STATISTICS ON REPRESENTATIVE CITY SYSTEMS

School System	*Type of Library*	*System of Delivery*	*Materials Requisitioned*	*Deliveries Made*	*Time Basis for Loans*	*Amount in Budget**	*Size of Staff*
Boston, Mass.	Central (in Teachers College)	Hired package delivery	Yearly	Irregularly	Irregular		
Buffalo, N. Y.	Central	Own truck	Three times a year	Weekly	4 days	$ 7,500.00	9
Cambridge, Mass.	Central (in Museum)	Called for by teachers	Weekly	Irregularly	Week	$ 500.00	3
Chicago, Ill.	Central	Hired package delivery	Yearly	Weekly or oftener	Week	$63,500.00	14
Dallas, Texas	Central	Own truck	Weekly	Weekly	Week or more	$ 4,644.00	3
Detroit, Mich.	Central and school	Own truck	One month to a year	Weekly	1 to 4 days	$68,200.00	20
Evansville, Ind.	Central	Truck—daily	Weekly	Daily	2 days	$ 2,800.00	2½
Kansas City, Mo.	Central	Messenger and truck	By semester or oftener	Weekly	Week or more	$11,000.00	4
Philadelphia, Pa.	Central	Own truck	Weekly or term	Weekly	Week	$10,000.00	16
Pittsburgh, Pa.	Central and school	Own trucks	Twice a year	Weekly	Week	$1.00 per pupil	9
Pueblo, Colo.	Central	Supervisor delivers	Weekly	Irregularly	Week or less	$ 200.00	1 part time
Sacramento, Calif.	Central	Truck	Bi-weekly	Twice weekly	(Films) 2 days (Slides) week	$ 8,000.00	3½
Sioux City, Iowa	Central	Package delivery	Semester	Weekly or oftener	One day (3 days in High Schools) Week	$ 1,000.00	2 part time
St. Louis, Mo.	Central (in Educational Museum)	Own trucks	Weekly	Weekly			

*This figure does not include salaries.

ville program. These are important considerations in any well ordered program. Every phase of the program must operate smoothly if it is to be functional. Some of the important instructional features of the program include those of utilization and experimentation.

From time to time the director has used various methods to secure a maximum of correct use of materials. Among the techniques employed are:

1. Bulletins and other printed materials are sent out periodically. These suggest uses to which aids may be put.
2. Talks before teachers' groups are made frequently by the director.
3. The director works with principals, supervisors, and department heads in encouraging wider and more correct use of visual aids.
4. Teachers are accepting the program and on their own initiative are inviting the director into their classes to work with them in planning the use of materials. It is on this basis that the program should expand most in the future.

5. A new development in our ninth year program is the so called "General Living" Course. Instead of being divided into smaller class groups on the basis of subject matter divisions, the freshmen classes are arranged in groups of about 100. These groups work together with a committee of four teachers. One of these teachers formerly was a social studies teacher, another an English teacher, another a Science teacher, and another a commerical teacher. One of these teachers is chairman of the teacher committee. The "General Living" portion of the day takes in three clock hours. The groups are free to work on any problem which they may care to set up relating to a better knowledge of their school and community. The lengthened time permits them to do many things formerly impossible under the forty or fifty minute class periods. Trips, use of radio, assemblies, etc., grow out of the work.

It is in the area of "the experiment" that many teachers become thoroughly sold on the visual technique. No matter how much conclusive evidence has been compiled by others proving that a visual procedure is superior to other methods, the teacher who wishes to repeat or try a variation of the experiment should be given all the encouragement in the world. Some of the ideas which we have used to experiment with include:

1. Transcribing dramatic sketches written and broadcast by students, then playing them back to the classes which produced them as well as to other groups interested in the content of the broadcast. This resulted in increased reading of so-called "required books," as reported by teachers and increased reading of the same books by adults as reported by the public libraries.

2. Effect of multiple showing of films. This experiment is just now being made. A film is shown to one group once, another twice, and another three times. Appropriate tests are given and an attempt will be made to measure the effect of repeated showings.

3. Using the opaque projector as a device for teaching reading.

4. Making purposeful school journeys to vitalize classroom work.

5. Teachers assist in evaluating newer materials which are to be added to the library.

6. Course of study committees include a convenient listing of visual materials at appropriate places in the courses which they develop.

7. Teachers and administrators are encouraged to enroll in summer school and extension classes in visual education.

No matter how often such research and experimentation is carried on, it is wise to let it be continued. Participation in an experiment is an effective method of winning friends to it.

There are many cities throughout the country which have developed outstanding programs of visual instruction. Some of these are tabulated below. As examples of large and small cities I will report on Chicago and Buffalo in some detail.

Chicago circulates all of its visual material from a central depository. Every item which is circulated is carefully checked each time it is returned so that it will go out again in good condition. All material is delivered by a hired package delivery service at 25c per stop. Packages leave the library at 8:00 a. m. and are delivered not later than 2:00 p. m. of the same day. Pick-ups made during the day are returned to the library by 8:00 a. m. the following morning. Since the delivery service covers an area of 325 square miles, the Chicago department feels that the service is quite adequate. The commercial service has proved to be cheaper in Chicago than if the school system owned a number of trucks.

All visual aids in Chicago are circulated on a weekly loan basis. Schools may order their entire program of visual materials one year in advance. As the Chicago teachers become acquainted with the material which is available, many of them keep a record of the particular aid they want at a certain time during the semester. From this record they make their orders for subsequent semesters.

Some of the schools prefer block booking. In that instance the entire program for a school is set up in September and the school is notified of its schedule for the year.

Other schools prefer to order visual materials from time to time as they need it. The method of booking is left with the school.

Exclusive of salaries the Chicago visual education budget is $63,500. The Chicago staff consists of one director, one secretary, one accountant, one booking clerk, and two assistants who handle all of the circulation record, eight inspectors and order packers. In each public school there is one teacher who serves as a director for the visual program. It is the business of this teacher to see that the program functions within his school.

Chicago's program is confined to 16 mm. sound and 16 mm. silent films and standard stereopticon slides. The films and slides circulate; the projectors do not. Projectors are picked up once a year during the summer and are given a thorough inspection and overhauling. The library consists of 5,000 reels of films, twenty per cent of which are 16 mm. sound; 2,500 sets of stereopticon slides averaging about forty slides to the set; slightly more than 100 sound projectors and approximately 500 silent projectors, and 1,000 stereopticon lanterns.

Buffalo uses the central depository system. Visual aid supplies are delivered to the schools by truck. The city is zoned into two divisions. Delivery is made in the first zone on Monday and in the second zone on Tuesday. Pick-ups in the first zone are on Thursday and in the second zone on Friday. As is evident, visual aids remain in the schools of the first zone Monday through Thursday, and in the second zone Tuesday through Friday. When material is returned to the central library, it is inspected, repaired, and repacked ready for redelivery. Visual aids are requisitioned in Buffalo over three long-term periods. The first is from September to the Christmas vacation, the second from the Christmas vacation to the Easter vacation, and the third from the Easter vacation until the close of school. The budget in Buffalo allows $15,000 for salaries and approximately $7,500 for supplies and equipment. The Buffalo staff is comprised of one supervisor, one repair man and operator, one clerk, one stenographer, three film and slide clerks, one driver, and one driver's helper.

This report points out a number of similarities among the audio-visual programs throughout the country. In all cities reporting, the central depository system is proving most practical. Two of the cities reported that they had discounted a zone plan as being too costly. Several cities place certain types of materials, such as flat pictures and slides, permanently in each school, while films are distributed from a central library. In nearly all cases visual materials are distributed by a truck owned by the public schools. In a few instances, the school city found it more economical to hire delivery service on a package basis. The weekly system of requisitioning materials was most popular, although some systems permit orders to be filed as long as a year in advance. An encouraging feature of the developing visual education program is that nearly all programs are included in the school budget. Some of the visual education budgets are quite substantial. The staffs handling the various programs are usually in proportion to the size of the school city.

The Individual School Program

R. B. WOODWORTH

Prin. Roosevelt Jr. High School
Fond du Lac, Wisconsin

VISUAL aids to learning are as old as education itself. While it is fairly safe to assume that every American school uses them in some form or another, it is equally safe to assume that very few schools make optimum use of this most effective adjunct to the learning process. No school administrator who is acquainted with recent educational literature will question the efficacy or desirability of visual aids to learning. Yet in spite of what appears to be convincing evidence, visual education programs have failed to get the enthusiastic or intelligent support they deserve from school administrators in general.

Freeman of Chicago, in 1924, defined visual education in substance as a "grouping of educational materials. . . . based not upon subject matter, but upon a method of presentation. This method has as its essential feature the fact that it belongs to one of the senses. Such a situation is without parallel. We do not have a department of auditory education, of tactual, kinesthetic, gustatory or olfactory education."

In setting up a department whose materials, equipment and devices cut across and enter into the functioning of practically all other departments, we are violating an old established principle of school administration. If a new department is not set up, how then shall visual aids be administered? Can a visual education program be introduced without a director? Should the director have time off from teaching? Who will decide on the specific aids to be used, director, teachers, or others? Who will keep the mechanical equipment in working order? Shall each building have its own equipment or shall visual aids operate through a city-wide department? Where is the money coming from to establish this service? Shall all departments share equally in the budgetary provision for visual aids or how shall it be done? Shall a film and slide library be established or shall they be rented? These and many other problems confront the administrator at the start.

Many administrators have envisaged such conflicts ahead and have gracefully backed away from visual education because of them. School men whose principal interest is a smooth running system will be inclined to wait until the more progressive schools have solved most of these problems. Even now there are timid principals and superintendents who are still hesitating after ten or fifteen years exposure to the impact of the more modern types of visual education.

Before a school starts to build its visual aids program it should bear in mind that the field of visual aids really includes the following:

Field trips and excursions—Museum specimens—Models, replicas, dioramas—Opaque pictures—Maps, globes, charts, graphs, etc.—Stereographs—Lantern slides—Strip films—Motion pictures, (silent and sound).

These materials may be classified for convenience under five headings, i.e.:

Field trips — Museum materials — Graphic materials—Still pictures—Motion pictures. The last classification, motion pictures, is the only one that can lay any claim to being new in education.

Field trips and excursions rank high in value because of their extremely objective nature. This is the most concrete aid to learning of them all, though circumstances often prevent its most effective use. Problems of pupil transportation, allotment of time, size of classes, rigidity of teaching schedules and the like sometimes add up to a total which outweighs the advantages and renders the whole project impractical. In spite of such handicaps the school with which I am connected undertakes occasional visits to the state capitol, the state penitentiary, to circuit court and to the local library and museum. Excursions planned for early morning or late afternoon permit part of the trip to be taken out of the pupils' own time. We have operated "Know Your City Clubs" successfully for four years, using the school activity period and some of the pupils' own early morning time for weekly field trips. These trips into factories and industrial plants have been the means of establishing the most cordial relations between school and local enterprise.

Schools so situated as to be able to use the facilities of a large city museum are indeed fortunate. Many of the larger museums have loan collections which are sent out to schools. Any school without facilities of this type should start a small museum of its own. Any enthusiastic teacher can induce her pupils to start collecting specimens. Inexpensive display trays made in the Manual Arts Department or low paste board boxes with glass or cellophane covers will serve most purposes. Pupils themselves should be encouraged to label and arrange their own exhibits wherever possible. Collections of moths, butterflies, leaves, plants, weeds, rocks, minerals, shells and the like lend themselves to this type of activity. An aquarium makes an excellent room or class project and pupils are often willing to contribute everything necessary to establish one. Glass sided cases are preferable but not an essential part of such a project. In a like manner a vivarium may be established with pupils furnishing the small animals and plants.

Under graphic materials could be included—maps, charts, globes, diagrams, graphs, posters, drawings, cartoons and similar materials. It is the writer's conviction that a collection of graphic materials should be accumulated by every teacher. Any alert teacher will find much usable material that can be cut from daily papers, Sunday supplements, magazines, advertising folders and trade or professional journals. Such material should be mounted and filed away so that it may be available at a moment's notice. Departmental teachers may find it advantageous to have a central file for their department. This material is easy to collect and is most inexpensive. With a balopticon and screen the smaller materials may be shown so that the whole class may see them at the same time.

Still pictures will include all opaque pictures, textbook prints, stereoscopic views, lantern slides and certain of the micro-projection slides. Textbooks on the elementary and high school level do not offer nearly enough material to furnish the desired motivation or end results, learning. Like graphic materials opaque pictures may be gathered from innumerable sources at small expense. Every classroom should be equipped with adequate bulletin board space to accommodate large blocks of these easily obtainable materials. The modern trend, if I interpret it correctly, is for less blackboard and more bulletin or exhibit board.

Lantern slide materials introduce certain additional and desirable features, difficult or impossible to accomplish in other ways. First, showing a series of slides to the whole group at once saves a great deal of class time; second, the resulting class discussion can take place during or just after the showing when pupils will be most eager to give their contributions; third, the resources of slide rental agencies are usually much greater than the teacher's for procuring authentic materials; fourth, lantern slides are easy to procure on a rental basis and fairly easy to manufacture at home if something special is desired. The cost of a good portable stereopticon is about $70.00 and the rental cost of slides is quite low. A combination balopticon and stereopticon enables one to project opaque pictures of postcard size as well as lantern slides. A standard model of this type lists for about $120.00.

Micro-projection is quite new and is especially valuable in the sciences of botany, biology, physiology and bacteriology where it is desirable to show still or live microscopic phenomenon. Standard units in this field range from $50.00 to $150.00 depending upon the power of the unit. Attachments may be purchased for about $25.00 which will change an ordinary compound microscope into a micro-projector which is very adequate for classroom purposes.

A decade of experience in the use of motion pictures has convinced the writer that there are certain distinctive contributions made by motion pictures. The motion picture is the most realistic of the picture aids. It affords us an almost perfect illusion of reality through action, color and sound. While motion is not essential in depicting many things it becomes very essential in understanding such a complex thing as the beating

of a human heart. Motion pictures for diagrammatic instruction, or wherever action of any kind is involved, are invaluable. Whether it be the illustrating of the digestion of food, the circulation of blood, the action of a gasoline engine or the trek of our early pioneers across the prairies, no teaching device has demonstrated its effectiveness quite as well as the motion pictures. They have an urgency of appeal to most pupils which textbooks do not have; they arouse interest quickly and if they are wisely administered provoke discussion, thinking and learning. Many of us have felt, and recent experiments have confirmed the hypothesis, that pupils can acquire certain types of information more quickly, more thoroughly and retain it longer through motion pictures. This is particularly true of low ability groups who bog down easily under the verbalism of textbooks.

Before an adequate visual education program can be established for the individual school, certain practical aspects of the problem must be considered. The writer will attempt to point out some of the problems and offer suggestions as to how they may be solved, or at least circumvented.

Who shall head up the program of visual aids in the individual buildings? This will, of course, depend upon the size of the building. In a small school the principal or any interested teacher could do everything necessary. In large schools I find no uniform procedure. It is usually a person who has more than the ordinary amount of interest in visual aids, often he is an enthusiast. Heads of Science Departments, principals, vice-principals and science teachers are most often mentioned. Such leaders should be given some time on the schedule to accomplish these additional duties.

Who shall start the program? Inspiration for better visual aids is very frequently provided by a classroom teacher or a principal who has become aware of the advantages long before the superintendent. By starting out with the least expensive aids such as field trips, still pictures, graphic or museum materials, the attention of other teachers and of those in authority will soon become focused on your program.

How keep it going? If the program stalemates at the point of buying equipment, try inducing your principal to conduct some sort of a benefit for your visual aids program. Enlist the aid of the Parent-Teacher group or the Mothers' Club in your project. Offer to raise half of the amount necessary for your first piece of equipment if the Board of Education will appropriate the other half. Select the less expensive types of equipment first and defer the more expensive types, such as motion pictures and sound equipment, until later. Exhibit your equipment and methods by showing a model class before your Parent--Teacher group. Invite your superintendent and members of your school board to attend. Keep showing your interest and it is more than probable that others will see the advantages of the program.

PLATE I

VISUAL AIDS

January 15-January 19, 1940

504	*Hot Air Heating*	16 mm. Silent
559	*Bituminous Coal*	16 mm. Silent
1098	*Anthracite Coal*	16 mm. Silent
1068	*Digestion*	16 mm. Silent
680	*Foods and Growth*	16 mm. Silent

Darkening of Classrooms. Modest beginnings will likewise prove advantageous here if the program must progress slowly. Start out with one room, a vacant one if possible. Curtains made up of blue denim designed to draw from the center and to cover the entire block of windows are adequate and inexpensive, about $13.00 for the average classroom windows. By a rotating schedule or the exchange of room a surprising number of pupils can participate. As the need develops ask that more rooms be equipped for darkening.

The Projection Screen. Daylight screens are rather expensive and not always satisfactory. In darkened rooms an ordinary white window shade may be mounted on a narrow board and suspended above the blackboard by eyelets and hooks. This makes a satisfactory screen for most every classroom purpose and is easily taken from room to room. If only one room is to be used for projection it would be wise to use somewhat better equipment and fixtures.

Teachers should have a prominent part in shaping of the building program of visual aids. Any scheme superimposed from above should be avoided. Unless teachers themselves are convinced that the aids are desirable and worth the effort, unless they are allowed to synchronize the film offerings with their courses of study, little will be accomplished that is worthwhile.

A partial study in Wisconsin indicates that the Science Departments make the most use of motion pictures. In planning a visual aids storeroom it is well to locate it near the Science Department or near whatever department is likely to use the most equipment. *The more accessible the aids, the more they will be used.*

The operation of mechanical equipment need offer no serious drawbacks. In buying equipment it is easy to insist on a demonstration or that the visual aids chairman or director be instructed in the operation of every machine. This person can, in turn, instruct teachers. In one Wisconsin high school the director of visual aids sponsors a student "Projection Club." The members learn to operate the machines during club time and act as operators during vacant periods. It is wise to have one person responsible for the oiling, checking and minor repairing of mechanical equipment. Complete overhauling of moving picture machines had best be done at the factory.

Sound equipment for classroom instruction is making considerable headway. Many of the larger schools are

PLATE II

STEREOPTICON REFLECTROSCOPE

	1	2	3	4	5	6
M						
T						
W						
Th						
F						

EASTMAN MODEL K

	1	2	3	4	5	6
M						
T						
W						
Th						
F						

BELL & HOWELL MODEL S. T.

	1	2	3	4	5	6
M						
T						
W						
Th						
F						

PLATE III

SCHEDULE SHEET

TEACHERS: Write below your *Name* and the *Film* or *Slides* you wish to use on the *Above* Machine. List room if not your own.

WEEK OF *January* 15 *to January* 19

	Period I	Period II	Period III	Period IV	Period V	Period VI
Monday	Gores 559 1098		Ford 504	Gores 559 1098	Sullivan 1068 680	Sullivan 1068 680
Tuesday	Nelson 1068 680	Ford 504	Nelson 1068 680			Ford 504
Wednesday	Nuss 504	Gores 559 1098		Nuss 504	Nuss 504 Room 135	
Thursday			Cooper 1043 987	Cooper 1043 987 Room 231		Kerr 1043 987
Friday	Kerr 1043 987					

already using it extensively and scores of others plan to install it. This is considerably more expensive than the silent equipment and much more heavy and cumbersome to move. A good silent projector for classroom purposes lists around $120.00 while a comparable portable sound projector will list at about $300.00. Sound films coss more to purchase and carry a higher rental.

It is often said that sound film makes it possible to bring the master teacher into every classroom. While this may be true, seeing and hearing are only part of the learning process. Learning is the result of thinking, feeling and doing. The disadvantage of much sound film produced in the past is that while the subject might be appropriate, the accompanying talk has not been suited to the understanding of the listener, being too elementary or too difficult. Only careful adjustment to the grade level of pupils by film makers or by the teacher can correct this error. Recently film makers have attacked this problem with considerable success. Sound film excels where sound is an essential factor to the understanding of a particular film subject, i. e., the battle of Gettysburg.

A recent trend among film makers is to make many of the new subjects for sound only. This trend, if continued, will influence many schools to purchase some sound equipment since sound films cannot be run on the silent-film projectors. It is, however, possible to change over a silent-film projector so it can run sound film. Such alteration includes the addition of sound sprockets, the replacement of ,the aperture plate, shuttle, shuttle cam and the film gate mechanism. While these alterations look formidable they have been expertly done at the factory at the cost of only $25.00. This enables one to use both silent and sound films successfully on the same machine if one is willing to forego the sound effects. This is not proposed as a general policy but rather as a stop-gap arrangement to take advantage of late releases of sound film.

Large city schools may find it profitable to own their own libraries. Small systems and individual schools find it advantageous to use such free films as measure up to their standards and rent the balance. Many states subsidize an educational film service. Where this is procurable it will usually be found to be the best and most economical rental agency. Such service is frequently supplemented by films from commercial sources.

Small schools may find it profitable to investigate cooperative visual aids bureaus, especially if they operate in nearby territory. The cooperative system operating in St. Louis County, Missouri, is said to be efficient and successful. The Audio-Visual Council is another such cooperative which is operated by school people on a non-profit basis in Cook County, Illinois.

One of the big problems, as I see it, is to get teachers to make full and intelligent use of visual aids after the system has been set up.

In our own city we have attempted to solve this problem by:

1. Acquainting teachers with the best visual offerings obtainable, twice a year.

2. By allowing teachers to have a major part in the choice of films.

3. By having a record kept of every new film shown which lists such things as title, source, cost, time required for showing, and most important of all an "Evaluation" by each teacher. This is an invaluable aid in making up the lists of films for the next year.

4. By carefully synchronizing each film to the course of study. This is perhaps the most difficult part but one which brings maximum returns.

5. By ordering films, etc., far enough in advance to assure having the film on a particular day or in a particular week, makes it easy to arrange showings.

6. By setting up a Visual Aids Bulletin Board 3′ x 6′, in the General Office where all teachers will see it from two to four times each day.

7. By listing the visual aid offerings for at least one week in advance. Plate I shows a typical week's offerings of film. The serial numbers at the left are assigned by the rental bureau.

8. By listing each piece of available mechanical equipment on separate labels across the top of the bulletin board. Under each of these is placed mimeograph schedule sheets to be filled in by the teachers as desired. Plate II necessarily shows only a portion of the equipment and schedule sheets.

9. Plate III shows the same schedule sheet enlarged to show detail. This illustrates how teachers have completed their list of requirements for the week.

10. In this way the teacher can reserve the time for her showing of visual aids, reserve the particular equipment she wants, the room, and plan her week's work accordingly.

This scheme in a fifty teacher school has proven very advantageous. It has made the use of visual aids so easy and so convenient that there is no longer any excuse for not taking advantage of them.

Problems in the Production of Educational Motion Pictures

W. H. MADDOCK
Teaching Films Division,
Eastman Kodak Company, Rochester, New York

I FEEL that Dr. Hansen is entitled to a vote of thanks for his plan to bring together at this conference the producers of instructional films and you, who represent the users of such films when produced.

Some 12 years ago there was an active call from the then leaders of thought in Visual Education, for films which should aid in the teaching of many of the subjects which form a regular part of the work as laid out by the courses of study in schools throughout the country. Before our Company considered the question of producing such instructional films Mr. Eastman called for an experiment to determine definitely whether or not the motion picture film was adaptable to school work, and the late Dr. Thomas E. Finegan was called to plan such an experiment. No doubt most of you are familiar with what has since come to be known as the Wood-Freeman experiment, and the results it showed.

When Edison invented the kinetoscope, his first thought was that its principal value was the contribution which it could make to education. With his characteristic vision, he realized at once the extent to which the motion picture would modify the factors of both time and space. As late as 1928, when our division of the Kodak Company was organized, Mr. Edison—while in Rochester as a guest of Mr. Eastman — showed more interest in the plans of the Kodak Company for the making of teaching films than in anything else with which Mr. Eastman was connected.

The late Arthur Brisbane visited Rochester some years ago to address a banquet at the Chamber of Commerce. During the day he spent an hour with us at our office and expressed the desire to see one of our teaching films, and we screened for him our film on *Simple Machines.*

In his address that evening, in paying tribute to George Eastman, he said—"All else that he (Mr. Eastman) has done, may, in the future be accounted less important than his work for education by motion pictures." Please bear in mind that the thought at that time was along the line of *instructional* films—and I sometimes wonder if the leaders of that day would approve of some of the uses to which the motion picture has since been adapted. The almost universal thought at that time was to take the motion picture out of the entertainment and amusement field in which it had, up to that time, been practically exclusively used, and adapt it to the teaching of the children. Our interest and efforts from the first, have, as you know, been concerned with the production of motion pictures for instructional use in the classrooms of schools and colleges—and we have done nothing in other fields.

I wonder if you, who are actively engaged in the work of Visual Instruction, realize the wide gap which exists between the plan of instructional and entertainment films. The traditional pattern of the entertainment film is based on the time-honored dramatic formula of introduction—climax—and conclusion—usually a conclusion which dismisses the subject with an air of finality. The film story is built on the general plan of boy meets girl—boy marries girl—and they live happy ever after. I mean by this, that

the film tells the *whole story*. Incidents of the film story are all centered around the characters of the story, either directly or indirectly, and there is little call for much thought on the part of the audience. This is all done *for* the on-looker.

A friend commenting recently on one of the films which has received wide publicity of late, as teaching the life of the people in certain areas, remarked to me that any pupil seeing the film might easily conclude that every incident shown, was important only as it influenced the lives of the hero and heroine, rather than that such incidents depicted typical experiences in the lives of real people in such situations.

It is imperative, in appraising the value of the teaching film, that we bear in mind that its construction pattern is in complete contrast to entertainment standards. The teaching film does not undertake to tell the whole story, as a matter of fact we deliberately avoid the complete continuity that is characteristic of theatrical films. The idea is to present a problem in such a fashion that the student will be stimulated to inquire, investigate, and eventually form conclusions on his own initiative. The teaching film is produced in collaboration with competent instructors — is correlated with the subject matter taught in the classroom and is designed to be used as a regular and integral part of classroom procedure. It is assumed that the pupils will receive some preliminary instruction before viewing the film and that a discussion of the subject will follow. It is desirable for this reason, therefore, to avoid an air of finality in concluding a film.

As the whole subject of Visual Education is a comparatively new one to all of us, it is not un-natural that many of its problems are not as yet fully understood. This was illustrated by a conversation between one of our representatives and two students enrolled for a course in Visual Education, which was given two years ago at a summer session of a leading university, located on the shores of Lake Michigan. The man giving the course was a very keen director of Visual Education—whose name I shall not mention, as he was in no ways to blame—but I may say that he is in charge of Visual Instruction in a city in which is located a company whose name begins and ends with K and which company enjoys the reputation of being the largest manufacturer of photographic goods in the world. After one of the class periods, our representative tarried to chat with some of the students. One very intelligent young lady in the course of conversation said that she could not see why producers of instructional motion pictures had to charge $24.00 for a 400-foot film, as she was "sure" that it could not possibly cost more than $40.00 to produce such a film. A second student, much wiser than the first and not unwilling to admit it, interrupted the conversation and remarked that she was "sure" the first young lady student was mistaken, as she knew that some of the instructional films could not have been produced for less than $200.00. When you know that we often pay for the scenario alone more than this last figure, you will realize the need for some such a get-together as this meeting today.

This brings us to one of the major problems of production—the coordination of pedagogical authority, and motion picture production technique. It is a fact that present generation authorities in educational matters were trained without benefit of the motion picture. Knowledge was acquired — all ideas and concepts were transmitted through other mediums — the textbook, the still picture, maps, diagrams, the black-board, etc. — all mediums that were essentially static in character. In complete contrast, the essentially dynamic character of the motion picture is the factor which constitutes its major contribution to learning. For the individual who has been trained to think and express ideas in the static and abstract form of print, it is extremely difficult and sometimes impossible for him to consider a particular subject in terms of *visual images in motion*. Almost without exception, the first draft of every scenario we have ever produced has been submitted in the form of a "paper"—a wordy tract—authoritative, of course, but absolutely devoid of any dynamic qualities whatsoever. A recent example prepared on the basis of a single reel, 1000 feet in length, included 600 feet of title. If there is one point more than another in connection with production of instructional films, which I consider to be our mutual problem, it is the desirability of thinking in terms of the moving image. There is no point in using motion picture film for a job that a lantern slide will do equally well, or in competing with the textbook where that medium is entirely adequate. Our objective is to limit the selection of both the theme, and the scenes and sequences illustrating it, to subjects which can be shown either to the greatest possible advantage, or by no other means than through the medium of the motion picture.

A friend of mine some time ago called to see me in behalf of a college professor, who, through no lack of ability, was out of a job. I told my friend frankly that we had no vacancy, but that I should be glad to talk with his friend. The professor called later, and I asked if he had ever thought of trying his hand at writing a scenario for an instructional film. His chosen field was that of Biology. He quickly answered that he *had* thought of such work, and had some things in mind, which he was sure would be well worth while. I gave him some type scenarios, to help him to understand the *form* in which such material should be submitted. A few weeks later he came to my office with a scenario on marine life—the first scene of which called for a photograph taken "on the bottom of the ocean," showing various forms of marine life swimming obligingly before the camera, and most of the balance of his work proved to be quite impossible. He saw the point and gave up with the remark that he was dealing with a technique of which he knew nothing.

You, I am sure, realize what such people fail to realize—that the producer of an instructional film does not have access to the box-office receipts of the successful theatrical movie with which to meet the costs of production on a Hollywood scale, but must rather depend on sales of the film at $24.00 per reel for even the return of the *cost* of production, not to mention any *profit* on the investment. Though many of our customers may not have any conception of what is possible or practical in the making of a film, they nevertheless are often hypercritical of the finished film, and in many cases, very unjustly so.

We have had many such instances: One such case which comes to my mind, had to do with our four-reel picture *George Washington,* which we produced at the request of the George Washington Bicentennial committee appointed by Congress. In Reel 1, showing the boyhood of Washington, he is shown packing his trunk—preparatory to running away from home to go to sea. His mother discovers him and persuades him to give up the idea—and gives him a pocket knife on which is inscribed, "Always obey your superiors." Shortly after the films were released, we received a very sharp letter from the Director of Visual Education in the schools of a prominent city—in which he said that his attention had been called to the scene I have just described, and said that anyone could tell at a glance that the knife was a modern make and not such a knife as was used in Washington's time. We were glad to inform the gentleman that the knife used in the picture was not only such a knife as was used in Washington's time, but it was *the* knife *owned* by Washington and loaned to us by the George Washington Museum of Alexandria, Va., for our use in making the picture.

The same gentleman wrote also that every history teacher in his city knew that it was Silas Deane, then minister to France, who carried back to America the treaty which had been negotiated with France by Benjamin Franklin. It is true that Silas Deane was then minister to France — but it is true also that his brother, Simeon Deane, held a subordinate position in the embassy in Paris. Simeon was returning to America and the treaty was sent with him. To establish the accuracy of this scene and check the entire picture for accuracy, we called to Rochester Dr. John C. Fitzpatrick of the Library of Congress, who has been selected by Congress to write a 20-volume, "Life of George Washington." The scenario had called for use of "Simeon" Deane—then, a prominent authority said "Silas" Dean—and we made over the title. When Dr. Fitzpatrick saw the title on the screen, he call out excitedly, "No, no, it was *Simeon* Dean who brought back the treaty. I asked him if he could prove it. He replied that he would be back in Washington the following morning, and would wire me the exact page, or pages, in the Journal of the Constitutional Convention which definitely stated that it was Simeon not Silas, who brought back the treaty. His telegram was received next morning and the question answered.

Another illustration along the same line was encountered in the production of our Science film, *The Historical Introduction to the Study of Chemistry*. We use a title, "In 1774 Joseph Priestley, an English Chemist, discovered Oxygen, by heating mercuric oxide floated on mercury." The scenario, prepared by a nationally known teacher of chemistry, called for a scene of mercury in a bell jar, with a vessel containing mercuric oxide floating on the mercury. It did not exactly make sense, so our Production Manager went to the University of Rochester library, where he found a copy of Priestley's own book—so precious that it is kept in the vault when not in use—in which he found that the mercuric oxide (a red powder) was floated on the mercury—but *not* in any receptacle or boat.

Perhaps I have said enough concerning the difficulties of production and now a word about the editorial problems. There has been much loose talk to the effect that only *teachers* can plan and make instructional films, and that commercial producers, such as our own company, can never hope to do so—as the scenarios and films are not submitted to teachers before production. If such statements had the slightest element of truth in them, they might be accepted—but the truth of the matter is that we have never made a film, the scenario for which has not been *repeatedly* submitted to competent classroom teachers for their advice and criticism before the actual production of the film was undertaken. Obviously, we cannot submit material to all of the teachers in the country, and some of the people who have not been consulted obviously conclude that none of the teachers have been consulted—which may account for some of these false statements.

The best instructional films can be produced only by the co-operation between you who know the subject and know what you want, and the skilled producer who knows how to put into the picture the material which you want shown on the screen. We frequently discover a difference in the opinion of those we consult, and, as a result, we must call in still other experts—and, in some cases, we must make compromises before the film meets with the approval of both sides in the controversy—showing that the opinion of one person, or even several persons, is not enough. Last year at the Cleveland meeting we had an illustration of such a situation, when a film was presented to this Department for its stamp of approval and virtual sponsorship. The film was shown, a free and frank discussion followed, and the judgment of those present was that approval was unwise. Since then, the company producing the film became convinced that it was unsuitable, and junked the entire production.

We continually receive letters asking why we do not produce films on this or that subject—and let me assure you we welcome all such suggestions—but many of the writers fail to realize what is possible in many instances—the suggestions ranging all the way from photographing Admiral Byrd's expedition to the South Pole, to financing an expedition into the heart of Africa. It is sometimes possible to secure such material through co-operating with some explorer or traveller, who plans to visit such places—as was the case in the production of our films on *Poland, Russia, Siberia, Japan, Manchukuo, Turkey, Germany* — all of which were photographed especially for us, on the basis of film scripts which we had provided in advance, by Mr. Julien Bryan while he was visiting those countries in search of material for his own lectures. But had we been forced to finance expeditions into those countries for the purpose of doing the work for us, the costs would have been prohibitive, as we could not expect to secure the return of our investment.

Another problem, vital alike to producers and to the success of the Visual Education movement, is the problem of promoting a better understanding on the part of school administrators, of when, where, and how a film is to be used to secure the best results. Many people, high in the ranks of school executives, still are not able to distinguish between giving a picture show, and using a film as an aid to instruction. A friend of mine was recently interested in finding some school architect who really understood the true function of the motion picture and other projected pictures in the classroom, and if possible to induce him to contribute an article for THE EDUCATIONAL SCREEN, or suggest his name to Dr. Hansen for a place on this program. A consultant in the United States Government was suggested as the person my friend was seeking—and he wrote a letter to this government consultant, outlining what he hoped for.

A reply to his letter came back promptly, saying that the writer would be glad to help out, but felt she should be frank in stating her views beforehand. She went on to say that she did not agree that individual classrooms should be used for visual instructional purposes, but rather that one day a week should be set aside for this purpose, in the school auditoriums. She wrote that it was too costly to equip the individual classrooms with dark shades and the other facilities necessary to project pictures.

I think you will be interested in the reply of my friend. He wrote: "What you advocate is contrary to what I have advocated ever since I became interested in Visual Education. If you would omit from your recommendation all use of the auditorium for projected pictures as classroom aids, I would agree with you, except possibly for the disproportionate cost of the average new school auditorium as compared with the rest of the school plant. Of course, if the auditorium could be used as much as your plans would call for, this cost might be justified, provided such use would be profitable, but I can't help taking issue with you or your recommendation that all Visual Instruction be done in the auditorium. I believe that projected pictures—both motion and still—should be considered as much an integral part of the classroom teaching materials as maps, blackboards, textbooks and all other commonly used aids to learning, and available for use in the regular daily classroom work. Possibly I am wrong and you are right, but if so, then the leaders who have guided and directed the Visual Instruction movement for these past 10 to 20 years are on the wrong track."

I have no word of criticism for any of the uses to which the motion picture have been adapted — the Motion Picture Appreciation courses — the Hollywood films made available for showing in schools—the feature films made for entertainment purposes and re-edited by the Progressive Education Association—but I am firmly convinced that the leaders of Visual Education in the schools should decide definitely whether they plan to use the motion picture as an aid to instruction in subjects which *must be covered* in established courses of study, or to discontinue such use of films for such other film activity as they may deem more important.

Unfortunately, we have only 200 days in the school year—not deducting holidays—and the problem is to find time for the many things which we should like to do if we only had more time—which reminds me of a state meeting of Superintendents in Massachusetts which I attended some years ago. The first session was a round-table discussion after the evening meal. Everyone felt perfectly free to bring up any subject for discussion. One prominent Superintendent arose and announced that he had a problem to which he had given serious thought, and he was anxious to know if the experience of other Superintendents agreed with his. If this proved true, he had a formal recommendation to make which he hoped might be approved by the meeting. He said he had been troubled greatly by the constantly increasing so-called "drives" for the teaching of different subjects which were forcing their way into the schools—each subject having more or less merit, but the aggregate amount of time consumed resulting in a serious problem. He mentioned "Better English Week" — "Toothbrush Drill Week"—"Be Kind to Animals Week"—"Fire Prevention Week" —"Safety Week"—"Automobile Driving Week"—and literally dozens of other "weeks." He then advocated the setting aside of one week of each school year, which should be used for only one purpose—the teaching of the subjects called for in the *course of study*. His suggestion met with unanimous approval. Possibly some such suggestion that we should set aside one week in the year for instructional films might meet with your approval.

We have been asked very often when may we expect to be able to buy instructional films in color, and I wish I were able to answer the question. We have just completed a half reel, of a little over 200 feet, of a color film on *How Birds Feed Their Young*. The photography was done by Dr. A. A. Allen of Cornell University and we selected this

subject because it seemed to be peculiarly well-adapted to color. Further than to say that it is very nearly perfect, I am not going to comment on the film, but leave it for your judgment when we show it in a few moments.

Frankly, there are many obstacles in the way of a general use of Kodachrome film for school films. In the first place, Kodachrome film is available only on 16mm—hence any motion picture on Kodachrome would of necessity have to be photographed on 16mm, whereas most of the better instructional films are, as you know, photographed on 35mm and reduced later, in printing, to 16mm.

Second, it is not practical to make a duplicate negative of Kodachrome film, which is a positive, as this would involve two steps between the original and the duplicate print, which would result in too great a loss in color. Duplicates are made directly from the original and as a result, there is the constant hazard that the original may be accidentally damaged in the printing process—in which case, the entire picture would be a total loss, as we would then have no original from which to print any additional duplicates,

Third—and not the least among the obstacles—is the added cost as compared with black and white film, and I am much interested in getting your reaction to the question as to whether you feel that you would be willing to pay what it costs to produce films in color. It now costs 10 cents a foot to get duplicates of Kodachrome films—which means $40.00 for a 400-foot reel of Kodachrome film. This, bear in mind, is merely the cost of printing each copy made from the original, and does not include a penny to apply toward the cost of the original photography—editing, sales cost, etc. The film I am about to show is 213 feet in length, we call it a half reel, and have priced it at $40.00.

I realize that, thus far, this conference between producer and users of instructional films has of necessity been a one-sided conversation, as I have given you my own view of some of the problems with which we, as producers, are confronted—but, if you have in mind some problems which I have not touched I shall be glad to discuss them as fully as time will permit.

(Showing of Kodachrome film, "How Birds Feed Their Young")

Standards in Teacher Training in the Use of Visual Aids

CLARENCE D. JAYNE
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IN discussing standards for teacher training in the use of visual aids, I propose to select and assemble those recommendations on which experts in the field of visual instruction seem fairly well agreed and to summarize arguments which support each suggested standard.

Any discussion of teacher training should have as its foundation the knowledge, skills and attitudes which an individual should possess in order to be a successful teacher. Once we have determined these, we can proceed with some degree of assurance to the building up of a teacher training program to develop those qualifications. As a mimeographed bulletin from the University of Ohio puts it, "What should a teacher know about and be able to do with visual aids?" After determining these requisite qualifications, we shall suggest standards for the institutional training of teachers and still another set of standards for the in-service training of teachers. These standards are not presented in order of importance, nor as ultimate standards or final goals. Rather, they are presented as what we consider to be the minimum requirements if we are to have teachers who can conduct a vital and really functional visual education program. With this much by way of introduction I propose to consider desirable standards of teacher competance in the use of visual aids.

First, every teacher should have the necessary knowledge and skill to handle efficiently all the routine mechanical operations involved in the use of visual aids in the classroom. Specifically, teachers should be able to operate opaque projectors, lantern slide projectors, film strip projectors, silent motion picture projectors, and in most cases the sound motion picture projector. Teachers should be able to make minor repairs and adjustments such as to focus the picture properly, to adjust the size of the screen picture, to replace the lamp, to clean the lenses and to keep the projectors properly oiled. They should know how to proceed in case a film breaks, or the loop is lost, how to prepare a classroom for the use of projection equipment. They should know how to prepare non-photographic lantern slides using glass, cellophane, or other materials. They should know how to make maps, charts, graphs, diagrams and sketches on the blackboard, for bulletin board display, for projection, or for classroom use by pupils. They should know how to collect, mount and file flat pictures and similar material. They should know how to construct or improvise various types of bulletin boards, screens, window darkening devices, etc. They should be able to set up effective exhibits. Teachers who have not mastered these mechanical operations not only do not make plans to use visual aids but are apt very definitely to plan *not* to use them because of a feeling of awkwardness, uncertainty, and sometimes downright fear of mechanical contrivances. And those courageous souls who proceed without such knowledge and skills often encounter reverses. Of course in some schools older boys are trained to take care of projection but this is at best a make-shift arrangement and can never equal in effectiveness the results obtained when the teachers can do these things for themselves.

Second, teachers should be skilled in the selection of educationally worthwhile visual materials. In recent years there has been a tremendous increase in the output of all sorts of visual materials. Newspapers and magazines, pamphlets and advertising materials, often contain pictures of high teaching value. There is a rapidly accumulating supply of lantern slides, film strips, and motion pictures available on most of the commonly taught units of subject matter. On a teaching value scale these materials range from some that are worse than useless to some that are really excellent. Teachers should not only know standards by which to evaluate visual materials but should be skilled in the application of these standards. Various studios show that teachers today, as a whole, are woefully lacking in this skill. Without specific training in this field it seems teachers are as apt as not to use inferior materials even when excellent materials are just as available.

Third, teachers should have knowledge about, and skill in, the teaching techniques involved in the use of visual aids. That is quite distinct from the mere mechanics involved, discussed under standard one, and involves the application of the principles of learning to the specific type of teaching situation found when visual aids are used. Specifically, teachers should know the various objectives which the use of visual aids may help to achieve; in the light of teachers' objectives, the past experiences of the pupils, the type of materials to be used, etc., the teacher should be able to decide intelligently whether to use the materials as a preview, as a review, or during the presentation of a unit; she should be able to plan an appropriate introduction and background to insure interest in the materials presented, and their close integration into other teaching procedures; she should know how to secure pupil activity when visual aids are used; she should know how to bring out relationships and promote inferential thinking in regard to observed situations; she should know when motion pictures should be used, when projected still pictures will serve the purpose just as well or better; when bulletin boards, blackboards, and other non-projected aids will be just as effective, or more so, than projected materials. This whole field of the application of the laws of learning to teaching with visual aids is tremendously important. Teachers can profit by a study of the experimental work already done but there is a crying need for more research in this area.

Fourth, teachers should be familiar with sources of material. This is so obvious I shall pass it by practically without comment. Teachers should know where to turn to find good flat pictures, maps and charts. They should be familiar with government bulletins, and other pub-

lications listing sources of pictures, charts, posters, samples and exhibits. They should know where to obtain catalogs of film strips, lantern slides, and motion pictures. Of course in school systems having a director of visual education, all such materials should be available from a central office. The initiative in bringing materials into the class room, however, should obviously always rest with the teacher, who therefore needs to be well acquainted with sources of supply.

Fifth, teachers should know the effect of the radio and theatrical motion pictures on children, and should have intelligent standards for the evaluation of radio programs, from the standpoint of their effect on children. The Payne Studies and other research have demonstrated that theatrical motion pictures are very definitely exerting a strong influence upon the attitudes and behavior of our young people. Comparable studies have not been made in the field of the radio but we do know that the average child spends from 2½ to 3 hours a day drinking in radio programs, and those of us closely enough associated with children to listen in on their intimate conversations, and to hear the songs they sing, and the jokes they tell, are confident that the radio as an influence on our children cannot be ignored. A check-up in our training school showed that out of the school room the children were spending much more time listening to the radio and going to the shows than reading. I think that there is little doubt but that the influence of the radio and the motion picture on children is much greater than the influence of the reading which they do out of school. Teachers have long felt that one of their responsibilities was to develop an ability in their children to select and appreciate the really worthwhile in literature. Teachers should assume a like responsibility toward the radio and the motion picture. Teachers should be made aware of this problem, should develop intelligent standards for the evaluation of motion pictures and radio programs, and they should be familiar with sources of information concerning them.

Sixth, and last, teachers should have an understanding of the psychology back of the use of visual aids—the dangers of verbalism in teaching and the values and limitations of direct contact and observational learning. The need of this background of fundamental information is so obvious that I shall not take time to discuss it further.

The six standards for teachers just discussed may seem high. Certainly in the country as a whole we have few teachers in our public schools who can measure up to them. If the use of visual aids, however, is to be made a really vital and integral part of our teaching procedures, the teacher standards can be no lower than those indicated. How, then, may we best train teachers to attain such standards? We shall discuss first, some of the standards for the institutional training of teachers and then, rather briefly, standards for in-service training.

Institutional Training

Standard One: Every teacher training institution should offer a general course in audio-visual instruction including in its subject matter all topics enumerated above under teacher standards, and with provision for laboratory work to establish the necessary skills. Arguments against the establishment of such courses I propose to present as fairly as I can, and then give the reply which advocates of such a course would probably make to each.

A few educators oppose the offering of such courses on the grounds that visual education is so new that we are not yet certain how effective it really is. They advocate postponing the establishment of such courses until further research has been carried on to establish beyond a shadow of a doubt that the use of visual aids increases learning significantly. They cite as a weakness in our visual education research, that many of the studies measured the result of showing only a film or two, often to a small number of children, and they point out that such studies offer little evidence as to the effectiveness of the regular, systematic use of visual aids throughout a school system over an extended period of time. They say: "Prove to us the value of visual aids and we will offer courses to train teachers in their use."

The reply to this argument might be stated thus. We recognize that many of the studies made in this field have been over such short periods of time, and with such small populations, that taken individually they are not very significant. The fact, however, that these small separate studies have almost *without exception* resulted in greater gains from the use of visual material, is significant. The consistency of the results of numerous research studies offers strong evidence. We should also point out that there have been some large-scale, well financed, and carefully controlled studies made, extending over considerable periods of time and with large experimental populations. These major pieces of research agree with each other, and with the large number of smaller studies, in showing definite gains from the use of visual aids. We can point also to the vast literature which has grown up in recent years criticizing our schools because of their extremely verbalistic methods and their lack of contact with reality. We can argue from all this, and from what we know of the psychology of learning, that the use of visual aids in learning should theoretically be very valuable—and all the research evidence we have bears out this theoretical conclusion.

Then turning from the field of formal education entirely, we can call attention to the tremendous increase in the use of visual materials by commercial agencies in carrying on their educational programs. Advertising agencies and publishers whose very existence depends on the efficiency with which they can educate the public, and who spend tremendous sums of money in research as to the most effective way of influencing human behavior, are swinging very rapidly to the use of visual materials. It is only necessary to compare magazines and newspapers of five years ago with those of today to be made very conscious of this change. If visual aids have been found by commercial groups to be the best approach to educating the masses, it is certainly a strong argument in favor of the school use of these aids.

Lastly, we can appeal to expert opinion. It would be possible to quote from some of the most prominent educators, not only of this country but of other countries as well, to show that visual aids and the radio in their opinion will in the not-far-distant future, quite revolutionize our whole educational program. We feel that there has accumulated enough data on the value of visual aids so that to hold up a program of teacher training waiting for more research, is no longer justifiable.

A second argument against the establishment of a general course in audio-visual education frequently advanced, is the following. Visual education should not be a separate academic subject. Teachers do not go out to teach visual education but rather to teach history, geography, science, etc., and such training as is needed in the use of visual aids should be given in connection with the regular methods courses, rather than in a special course. They argue that the use of visual aids will probably be better integrated with other teaching procedures if it is considered along with these other procedures in the traditional methods course. They also point out that it is impossible for one individual to give adequate training in the use of visual aids to students specializing in all the different fields of teaching. Therefore, instead of a general course (such as we have proposed in standard one) they would advocate the inclusion of material on the use of visual aids in the course on methods of teaching history, methods of teaching science, etc.

In reply, the following facts need to be considered. First, that if the teacher of each methods course attempted to give the information and laboratory training to his students which the teacher standards we outlined would require, it would mean a tremendous duplication of effort and of equipment. After all the science teacher is faced by the same mechanical problems as the first grade teacher in the operation of projectors, and will utilize the same general standards for the selection of visual materials, and the same general principles so far as teaching technique is concerned. The standards we set up were standards for all teachers and it would seem that training to meet these standards can be done much more conveniently and with less duplication of effort and equipment if done in a special course.

An additional argument in favor of a special course which is very convincing at the present time but which will, we hope, become less so with the passing of time is this: Practically none of the teachers in our regular methods courses have ever had any training or experience in the use of modern visual aids. It is tragic but true that because as a whole they belong to an older generation, they

(*Concluded on page* 114)

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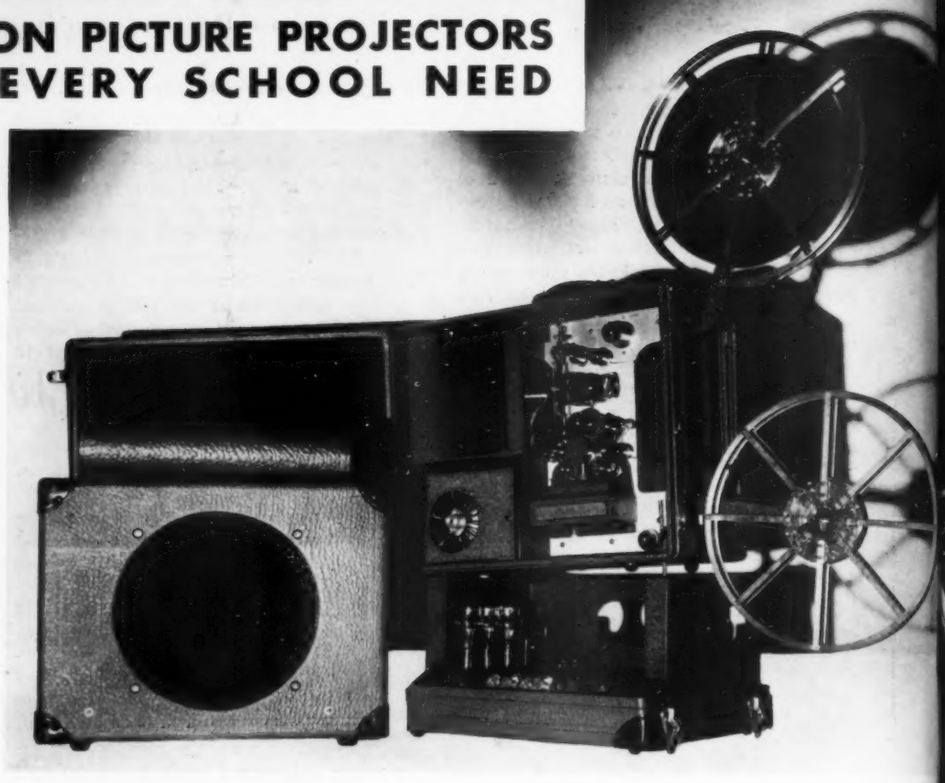

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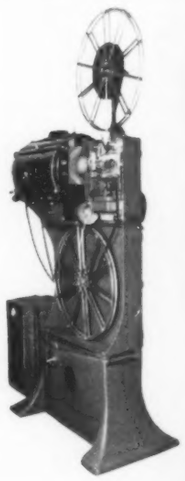

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probably know less on the average about the use of visual aids in teaching than do experienced teachers in the public schools. In some institutions not more than one or two teachers of methods courses can even operate a projector. This may not be typical, but it is a fact that few methods teachers are prepared either by training or experience to give any specific instruction concerning the use of modern visual aids even in their teaching specialty. So long as this condition continues we must face the fact that if we are to train teachers at all adequately it will have to be in a special visual education class.

Standard Two: *In every State there should be at least one course in audio-visual education offered on the graduate level.* Such a course is needed to develop leaders in the field. It is not enough to train only undergraduate students who will go out into classroom teaching positions. We need to have courses in which supervisors, principals and superintendents or experienced teachers may enroll for graduate credit. These individuals, who should form the real cornerstone of our visual education movement, must be given training in the fundamentals of the movement if we are to expect the use of visual aids to extend systematically and to permeate the entire functioning of school systems. From such graduate courses we should expect to have come from such courses, principals with an added interest in the use of visual aids and often perhaps with plans for the more adequate financial support of visual education. We should expect to have come from such courses supervisors who would stimulate teachers to make the fullest use of visual materials, directors of audio-visual education or instructors in courses in visual education. At present there are few individuals trained for such positions and graduate courses in visual education offer the only solution.

Standard Three: *Third, in every general methods course there should be careful consideration given to the special problems involved in the use of visual aids in the field covered by the course.* If this were done it would help the student to integrate the use of visual aids with the subject matter of his particular field and with other teaching procedures. It is probably impossible to do this adequately in a general visual education course. Of course this particular standard cannot be expected to mean much until we have teachers in charge of methods courses who are competent to give this instruction.

Standard Four: *In every teacher training institution there should be a good library of visual aids.* This need not incur a heavy expense to the institution if the materials were circulated through the public schools in its service area. Such a plan has many implications for the visual education movement but just now we are concerned with only the teacher training aspect.

It seems almost impossible to have students really become familiar with existing visual materials unless those materials are available over a long period of time. If a teacher training institution lacks such a library, it must resort to rental of such materials, and the cost generally prohibits their being kept more than a day or two. Under these conditions it is practically impossible for students to really become familiar with the material in their field. If the films were stored in the teacher training institution there is no reason why every graduate going out in the field should not have previewed all the films and slides in the library which pertained to his field.

Another advantage from a teacher training standpoint of having a library of visual aids available in each teachers college is that it would greatly promote the use of visual aids throughout the college. And if prospective teachers were taught in classes where visual aids were used extensively, they would go out much better prepared to use visual aids.

A third advantage, and one which cannot be over-emphasized, is that if visual aids were always readily obtainable it would make possible the extensive use of visual aids in practice teaching. This use of visual aids in the training school tying up the theory learned in the general course with actual classroom teaching, is a matter of supreme importance. The greatest apparent weakness of these present courses, as often pointed out, is the lack of actual classroom demonstration and practice. If visual aids were always readily obtainable in our training schools, these problems could be solved. So long as films have to be rented, solution is doubtful.

Standard Five: *In every teacher training institution there should be training in radio and motion picture discrimination.* The rather rapidly increasing number of high schools throughout the country giving some attention to motion picture appreciation is an additional argument in favor of including such materials in teacher training institutions.

Few teacher training institutions in the country today can meet the five standards just suggested. We have a long way to go before our beginning teachers are given adequate training in the use of visual aids. This fact emphasizes the importance of the in-service training of teachers.

In-Service Training

There are a number of techniques which may be used in this in-service training of teachers. Special faculty meetings may be called with attendance optional for the purpose of calling attention to visual material available, or to demonstrate the use of certain materials, or to give instruction in the mechanics of handling visual materials. Visual education conferences can be conducted in county or regional districts. Materials may be prepared for distribution to teachers which will aid them in correlating visual aids with their courses of study. But perhaps the most important means for the in-service training of teachers is to make provision so that whenever a teacher or a principal, or a curriculum committee, needs help with any problem involving the use of visual aids—be it so trivial as learning how to operate a projector or so important as the outlining of a whole visual education program for a school system—that there be some individual adequately trained to give the help needed, and to whom the teacher has a right to turn for help. In other words, the in-service training of teachers is going to depend largely on the leadership which can be developed and made available to teachers. For that reason the three standards I am going to suggest have as their objective the establishment of recognized sources of leadership in the use of visual aids.

First, in every State there should be some individual connected with the State educational service whose major responsibility would be that of furnishing leadership to school systems in developing programs for the intelligent use of visual aids.

Second, in every school system there should be a full or part time director of visual education, one of whose duties would be that of promoting a teacher training program within the system.

Third, in each school building there should be one individual in charge of visual materials and capable of training other teachers in such matters as the mechanics of projection, etc.

The cost of providing the types of leadership just outlined would be small indeed as compared to the wastes which may be charged to the unsupervised use of visual materials by untrained teachers or by the failure of teachers to make use of these materials when they are available.

In conclusion may I say that in the use of visual aids, as in every other phase of education, the skill and ability of the teacher is by far the greatest single factor in determining the results achieved. You may put projectors in every building in the country, you may produce materials that are works of art photographically and that are sound pedagogically, you may provide room outlets and built-in screens, but unless you have teachers with a fundamental understanding of the basic principles involved in the use of visual aids it will profit you nothing.

Diversitorials

(*Concluded from page 92*)

more films, and obviously this greater experience with films in itself enhances a teacher's qualifications for rendering significant judgment on a film's teaching value.

In the near future, each present member of the Judging Committee will receive a communication direct from this office—a complete printed list of present judges with the contribution of each to date indicated, a proposal for a somewhat new basis for cooperation, and a cordial invitation to continue or extend his or her participation in the Project as a member of the limited Committee of Five Hundred.

NELSON L. GREENE

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A Monthly Digest

Conducted by Etta Schneider

Administration of Visual Aids

What Do High Schools Want in Films? —Godfrey M. Elliott, Oakvale, West Va.—*Secondary Education,* 9:21, January, 1940.

Attention to the consumer problem of using educational films in the high school must be increasingly given, and some unanimity of opinion reached as to the kind of films producers should make. Film needs are now being dictated by the films available. The kinds of questions which need consideration for the guidance of producers are: What subjects need treatment in films? What should be the content? (Specialized? Generalized? Both?) Should treatment be factual, instructional, or documentary? What subjects lend themselves to treatment of each type? On what basis must we assume that all future educational films must be sound films? What is the desired length of a film unit? It is recommended that the N.E.A. Department of Secondary Teachers and the National Association of Secondary-School Principals undertake such a study cooperatively.

To Own or Not to Own?—*Scholastic,* January 22, 1940 p. 15-T

Two letters discuss the article by Lewis M. Lash in the November 20th issue of *Scholasitc.* Mr. Hansen, in his letter, takes issue with Mr. Lash in his estimate of cost for owning and renting films for a small school system. The second letter refutes the argument. The original article, together with these letters provides a stimulating basis for discussion, and one problem which cannot resolve itself by generalization, but must rather be determined by local needs.

New Nerves for Modern Teaching—Paul C. Reed, Rochester, N. Y.—*Scholastic,* January 22, 1940. p. 14—T.

The value of radio, sound films (March of Time, Human Relations Films), and silent films for the Rochester Schools is reviewed.

Rochester teachers are cooperating in the Ohio State Evaluation of School Broadcasts study, in the American Council on Education's evaluation of film project, and in the Commission on Human Relations study.

How Oakland Does It—Gardner L. Hart, Oakland, Cal.—*Scholastic, Jan.* 22, 1940 p. 12-T.

The Oakland schools have access to desirable materials of instruction, including such aids as films, filmslides, lantern slides, etc. as well as apparatus of all kinds. A photographic laboratory produces material upon request. Circulation and maintenance is centralized, providing maximum material at a minimum investment.

Techniques of Utilization

They Use Projected Pictures—*International Journal of Religious Education,* 16: 6 January, 1940.

At Yale University Divinity School, Professor Paul H. Vieth and his classes in religious education, with the cooperation of the Harmon Foundation, have experimented for several years in making motion picture films suitable for church school use. They have also tried out various ways of using aids in church work. As these students have gone to their own churches they have continued this experimental work.

This account is a summary of the experience of many of them, and the values they have found in the use of projected pictures. Films have been employed to good advantage in connection with Sunday evening services, for recreational purposes at parties or children's matinees, to personalize mission study in a church school group, and present problems for discussion. Home-made movies and filmstrips also afford many educational opportunities. One minister tells of using film strips in color for worship service. The use of stereopticon slides is a well established custom in many churches. It is possible for classes to make slides illustrating the study which they have been carrying on, and to show these in departmental gatherings. Churches going extensively into the use of projected pictures are advised to have a sub-committee on visual education to undertake the financing and supervision of this part of the curriculum.

How We Use Slides—Chester F. Leonard, Sneedville, Tenn.—*Church Management,* 16: 165-6 December, 1939

Vardy Presbyterian Community Church in Hancock County, Tenn., 30 miles from the railroad in the mountains, has been using slides for over 11 years, during which time they have collected over 4,700 slides on various subjects, illustrating almost any thought they wish to make impressive. Mr. Leonard cautions against using too many slides at one time, or poorly selected ones. Besides the Sunday services, slides are used on Friday community night, and once a week in elementary school bible study. The employment of slides has resulted in ever increasing attendance and interest in the church services and work, people coming from three and four miles distance in order to attend. Mr. Leonard invites questions and will be glad to give all the information he can.

Visual Teaching Aids — M. F. Foss, Washington, Penn. — *Industrial Arts and Vocational Education, 29*:26 January, 1940

Describes the use of modeling clay, models and a blackboard as visual aids for the teaching of mechanical drawing.

Research and Evaluation

Visual Aids and Safety — Nathan Doscher, Hygiene Department, Brooklyn College, N. Y.—*Safety Education,* 19:200 January, 1940

This article is based on a two-year study culminating in a doctor's dissertation at New York University on "A Critical Analysis of Some Visual Aids Used in Teaching Pedestrian Safety."

The study was made with 750 fourth grade pupils, typical of the student population of New York City. They were divided into four groups equal in intelligence. One was taught by the presentation of a silent film; the second by 25 slides accompanied by oral comment and the third through the display of a series of 25 posters. The fourth was given no formal teaching in safety at all and served as control group.

A pre-test on safety was given to all groups. The same test was given immediately after the safety lesson; and a recall test of the same test was given a month later. The results showed that the three groups with special instruction made significant improvement in safety knowledge. But, to the question of the relative effectiveness of any of the three visual methods, the answer is that there is no difference. They all showed equal improvement. If better habits depend on knowledge, these aids are valuable. There seemed to be no improvement in habit or knowledge regarding traffic lights, showing that none of the experimental devices are effective for that. Children of low intelligence gained more from the visual aids than did those of highest intelligence. The films were no more effective than the slides and posters.

Photographic Method for Studying Discrimination-Learning in Children — T. A. Jackson, Columbia University—*Journal of Experimental Psychology. 26*:116 January, 1940

Images (stimuli) are photographed on 35mm. filmstrips and projected on a screen before a group of 10 to 20 sub-

jects. The subjects in the reported experiment were children from second and third grades. The children are asked to indicate their choice by dropping tickets (Hat check stubs) into one of two boxes provided. The children may then be rated on the discrimination responses to the projected images.

School-Made Visual Aids

High School Movie Production—A. P. Smith, Hugh Morson High School, Raleigh, N. C.—*Journal of the N.E.A.*, 29: 23 January, 1940

The purpose of this program of amateur motion picture production was to ascertain whether anything of educational value could be accomplished. With the help of a camera company representative and local camera shop the necessary photographic equipment was secured for the project. A 200-foot comedy was first made as an experiment. Work was divided among members of the photography club, each having his own definite responsibility. After investing $35.00 a show was put on and 5c admission charged. After this encouraging success, they undertook a real task—making a picture that would permanently record major constructive activities of the school. Events were filmed as they might occur through a typical day.

Moving pictures should be used to further the educational program of the school and interpret the school's policies to the community. Further, the pictures sell the school to its own students. To make successful movies of educational value the program should last throughout the school year. Especial advice is given on the problem of lighting and purchase of proper film.

Book Reviews

Modern Methods and Materials for Teaching Science—Elwood D. Heiss, Teachers College, East Stroudsburg, Pa.; Ellsworth S. Obourn, Clayton, Mo.; C. Wesley Hoffman, Blairstown, N. J.—The Macmillan Co., N. Y., 1940 $2.50

This is a valuable publication to be added to all bibliographies in visual education. These science teachers or rather teachers of science teachers—have provided an analysis of the place of mechanical aids to instruction, the psychological justification, basic principles of use, a simple, clear-cut description of projection machines and what makes them work, and an evaluated list of sources of all types of science visual aids.

The first section of the book expounds the philosophy of science education held by the authors, and draws upon other points of view currently held. An adequate treatment of the whole problem of evaluation of outcomes brings together much valuable material, from experimental and other sources. The importance of the field of reading, social studies and creative expression in the successful teaching of science are all described clearly.

Of extreme importance to visual educationists, however, are Sections 2 and 3. "Materials and Devices for Teaching Science—Visual and Other Sensory Aids," includes first a discussion of the psychology of learning by the use of visual aids, and then proceeds to a discussion of the school journey; flat pictures and stereographs; photography; objects, specimens and models; designed materials (creative expression); the microscope, telescope; projection machines. For each topic abundant anecdotal and photographic illustrations are provided.

The last section, "Sources of Materials for Teaching Science" indicates the same effort of the authors as shown in previous sections at being practical. They have gone further than a discussion of the types and value of visual aids, and have compiled a fully-annotated and evaluated listing of science aids, such as flat pictures, models and specimens, charts and posters, 16mm films, and a bibliography of periodicals and books for students and teachers.

Teachers of science are indeed fortunate in that this long-felt need has at last been met. *Modern Methods And Materials For Teaching Science* provides a sound springboard from which any science instructor may proceed in the use of audio-visual aids. It remains for him to heed the excellent advice given in the book, and to adapt the source materials to his own needs. Similar volumes in many of the other curriculum areas are sorely needed.

Visual Review, 1940—Published annually in February by the Society for Visual Education, Inc., 100 E. Ohio St., Chicago. 64 pp., 6¾ x9½. Free upon request.

Each edition of this splendid annual publication adds immeasurably to the literature on the visual field, as indicated by the title and writers of the twelve interesting articles presented.

"Colored Photography as a Visual Aid in the Art Department," by H. Rueben Reynolds, Utah State Agricultural College, Logan, suggests filmstrips and color slides that a teacher can produce to use in classes in art and architecture. "Geography Made Interesting through Picturols," by Esther M. Bjoland, Classroom Foundation Materials, Chicago; "Filmstrips as an Educational Aid," by Theodore R. Wright, Birmingham, Alabama; and "Instruction with Filmslides in Adult Education," by Ellis G. Rhode, WPA Educational Program, California State Department of Education, are concerned with the visual aid indicated by titles of the three articles. Broader visual programs are described in "Visual Aids in Instruction in the Secondary Schools of Jackson, Mississippi" by I. F. Simmons, "Using Visual Aids in Teaching Vocational Agriculture," by C. S. Hutchison, Department of Agricultural Education, Ohio State University, and "Visual Aids in Safety Education," by L. G. Christerson of National Safety Council, Chicago.

The visual program of the First Corps Area of the CCC is outlined in "A Film Service at Work," by John A. Fox. "Production of a Motion Picture for Parent Teacher Showings," by Alta McIntire and J. Kay White, reports on movie-making at the Pershing School in Berwyn, Ill. Advice on "Organizing and Utilizing Visual Materials in the Typical School" is given by Alex. Jardine of Evansville, Indiana, Audio-Visual Department. "Audio-Visual Education in South Carolina," by Charles S. James of the University of South Carolina Audio-Visual Bureau, and "Unique Visual Program Given in Cincinnati" afford further evidence of the national growth of the visual field.

Memo on the Movies: War Propaganda, 1914-1939—Winifred Johnston — Cooperative Books, Series I. No. 5 1939. Norman, Oklahoma. Subscription to 12 numbers in Series I, $2.00. Single copy, 50c.

This is one of the most important publications currently available. It is important to teachers all over, and it has especial significance for those of us who are aware of the power of the screen as a medium for propaganda.

The author is particularly well adapted for the task of unearthing the many careful plans which caused the steady flow of newsreels, "educational" films and feature films during the period which preceded the last World War, for she was in the employ of the Chief Signal Officer in the War Department during our intervention in the war.

The book is brief, well-written and inexpensive and is therefore to be preferred to any review of it. It brings into sharp focus the importance of the screen in swaying public opinion in the direction desired by those who control, not only the movies, but all other avenues of propaganda and—as the author reveals—usually control many of the vital industries of our nation. *Memo on the Movies* successfully illustrates how important is the period before a war, and how carefully a free, democratic people must guard their right to know what is actually transpiring in their interest—and not be contented with the sifted, well-regulated propaganda machine which surrounds them.

Persons with special interest in "educational" films will find the description of their contribution to the war scare an important revelation of the pre-1917 days. Positives of films from large industrial manufacturing companies, in addition to 'nature stuff' turned out by the Bureau of Parks, scientific farming pictures from the Department of Agriculture and 'sanitation stuff' were all dressed up and inserted into newsreels with scenes of patriotic celebrations, women voting, seashore scenes, baby contests and the like. These pictures were designed to sell America to the world—and they did.

Memo on the Movies brings us almost as far as the morning headlines, in its strong warning about the kind of films to which we are now exposed. Whether or not we permit these films to lead us again to war is a challenge we must now face.

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SCHOOL-MADE MOTION PICTURES

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THIRTY-EIGHT reports on recent films produced by schools have been received in response to 104 cards mailed during the past month. From the returns it is evident that schools already in the producing field are continuing their work and that other schools are beginning to make their own films.

It is planned to send out 150 more check cards to obtain information on new films produced by schools. Readers of EDUCATIONAL SCREEN may aid in the sending of these check cards by suggesting names of schools that have produced or are producing films.

Schools may report their production activities to the editor for possible inclusion in a future list of films. In the report, the following would be very helpful: name of school, address, title and subject of film, date completed, length, width, made by, brief summary of or unusual facts about the film, and name of individual reporting the film.

Again a list of "newsreel" and activity films is presented. The films reported this month have been made on 16mm film and, unless otherwise specified, are silent on black-and-white.

A Production Crew with its equipment
(Greenwich, Conn., High School—Miss Eleanor Child, production director)

FLORIDA—Shots of students on the campus and in the classrooms of the Ponce de Leon High School, Coral Gables, are found in two films (700 and 750 feet), described by Elmer L. Day, dean of boys.

INDIANA—*School Dental Service* (400 feet), *Lincoln School* (800), *And So to School* (1200), are three activity films produced by the Evansville Public Schools Audio-Visual Department. Alex Jardine is the department's director.

MASSACHUSETTS—*A Visit to Brookline High School* (400 feet) shows the visit of two eighth grade pupils to high school and follows them from their entrance to the principal's office, the dean of girls, registrar, director of guidance, an auditorium period, etc. The film was used to acquaint eighth grade students with the high school. John V. Jewett, director of guidance, was the producer.

NEW JERSEY—*Adult Education* is the subject of a film produced at the Edison Junior High School, West Orange. Vincent Geiger is the school's principal.

A film used as a means of informing the public about the home economics work in a school, is reported by Miss Grace Hadley, supervisor of home economics, Junior High School, New Brunswick. It is entitled *How We Relate Home Economics to Everyday Living* (400 feet).

NEW MEXICO—F. S. Church of the Los Alamos Ranch School, Otowi, reports the making of 200 feet of film showing school activities, and 800 feet showing outdoor life.

NEW YORK—The Camera Club of East View Junior High School, White Plains, has produced *The Eyes of East View,* a newsreel of school activities (800 feet). F. T. Mathewson is the club's advisor.

A 400-foot film of a June festival, an outdoor physical education demonstration, is noted by W. B. Weyant of the Solvay Public Schools.

PENNSYLVANIA—A 3-reel film (approximately 1200 feet) dealing with the activities program of the East High School, Erie, has been shown before many local civic groups, according to Miss Miriam B. Booth of the English Department.

Editor's Note—A notable questionnaire survey, recently completed by William G. Hart, located over 90 school-made films, with full data on each, most of them available on loan to other schools. The films are listed in two groups, "Specialized Subjects" and "News Reels." The first group is reprinted in full below. The second group will appear in the April issue. (16mm footage given after title. All are black and white unless otherwise specified. Loaned free unless charge is indicated.)

Specialized Subjects

1. *Health* (600) Pupil health examinations; *Cactus Courageous*—Eighth grade class studies cactus, draws maps, explores; *Football-Basketball.* Loan. T. L. Alexander, Supt. of Schools, Haines, Fla.

2. *Sports Band* (Sound) Football game, crowd and marching bands; color film. Margaret Ross, Director Visual Education, Wilmington, Del.

3. *Early Denver* (500) Story of a complete school activity, all grades contributing, and culminating in an entertainment for parents. Loan. E. H. Herrington, Director Motion Picture Project, Denver Public Schools.

4. *Crippled Children's Room* (100); *High School*

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T. B. Testing Program (100). Loan. J. W. Primrose, Irving School, Quincy, Ill.

5. *Special Education* (800) Corrective speech, orthopedic, sight saving, oral deaf, open air, therapeutic work. Supt. John Alemmer, Public Schools, Escanaba, Mich.

6. *Campus Personalities* (400) Pictures of prominent personalities on the Iowa State College Campus. Loan. H. L. Kooser, Director Visual Instruction Service, Iowa State College, Ames, Ia.

7. *May Festival Review* (350) Folk dances in costumes; color film. Loan. C. J. Miller, Supt. of Schools, Ecorse, Mich.

8. *Nursery School* (100) A day in Nursery School from the time mother says goodbye at her door until he reaches home again. Loan. Fred E. Pitken, Supt. of Schools, North Andover, Mass.

9. *Busy Hands* (400) Survey of handwork in school; *Reporting through Movies* (450) Illustrated outline of possibilities for public relations films, produced for the 1939 A.S.S.A. Both films in black-and-white and color. Loan. Godfrey M. Elliott, Prin. Oakvale Schools, Oakvale, W. Va.

10. *One Hundred Years of Educational Progress in Maumee* (1600) History of school up to present time, with narration on records to accompany the film. Loan. H. H. Eibling, Supt. of Schools, Maumee, O. (Announced in February issue)

11. *Historic Akron* (450) Historic Indian spots, canal ruins, John Brown remains, early homes, animated growth of city showing additions; color film. Loan. J. Ray Stine, Prin. Central High School, Akron, O.

12. *High School Opportunities in Illinois; Our Children's Opportunities; Modern Schools at Work*— First two show contrast in educational opportunities offered in elementary and high schools of state; third shows modern schools and modern teaching methods in state. Small rental charge. Illinois Education Association, Springfield, Ill.

13. *Spring Festival at School 51* (800) School entertainment involving 900 children. Loan. Alan H. Nicol, Director Visual Education, Board of Education, Buffalo, N. Y.

14. *Battle Creek Junior High Schools Visit Greenfield Village; Verona School Kindergarten Circus; Verona Junior High School Physical Education Activities; Battle Creek Annual Elementary Play Day; The Outdoor Classroom in Battle Creek.* Keith Elliott, Prin. Verona School, Battle Creek, Mich.

15. *Federal Inspection and Governor's Day* (400); *Commencement at Iowa* (400). L. W. Cochran, Supervisor Dept. of Visual Instruction, University of Iowa, Iowa City, Ia.

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16. *Introducing Your Library* (650) The facilities and proper use of the library; color film. Loan. Lucille Walsh, Fordson High School, Dearborn, Mich.

17. *Our Children Learn to Read* (400) The methods used in a modern school to teach reading; Junior high follow-up; color film. *Physically Handicapped Children* (450) A trip through the department for physically handicapped in the Lowrey School. Loan. William G. Hart, Lowrey School, Dearborn, Mich.

18. *School* (400, sound) A day at school; 10 year-old group with the "school store as their project." Recording of voices of children as they go about their tests. Small rental charge. Elizabeth Moos, Director Hessean Hills School, Croton-on-Hudson, N. Y.

19. *Making Moline More Beautiful* (1200) Results of city beautification program, yards and gardens; *Some Results of Our City Beautification Program* (1200) Flowers, new bridges, water fronts, improved streets; *Moline Cares* (1000) Work of Community Chest in Moline. All three color films. C. R. Crakes, Prin. Senior High School, Moline, Ill.

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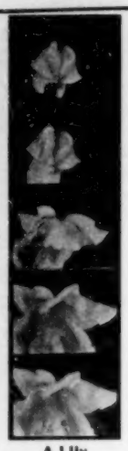

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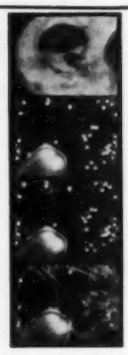

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Standards of Geographical Film

(*Concluded from page* 96)

correct application of a title to a small unit of geography of the northwest United States. This title corresponds to a common unit in the course of study and it is given an exact placement for its use.

The Portraits of Portugal has an indefinite title which could well be changed to *Wine Making in Oporto. Yellowstone Park* in color is excellent as a picture of a physical phenomenon but the title should be more definite as to the aspect of the park that is presented.

Titles of films are as important as headings in book chapters. A correct title covering the contents of the film is *Holland in Tulip Time.* It is localized and it pictures in color man's specialized activities in a particular environment. *Roaming in Holland* is a poor title as it is indefinite as to its content. *Children of Holland* is a clear title of a presentation of family life in Holland. *Argentine Argosy* is a fancy title that would be more appropriate as *Argentine Wheat and Beef.*

The Length

At present 400 feet is a standard film length in 16mm sound or silent. This is a convenience to the producer and it fits well in the regular school work as a fifteen minute part of a class lesson. A longer film is not yet approved for the elementary school. However, in this experimental stage, it is not wise to set an arbitrary length. A series of 100 foot subjects might make a 400 foot reel; each subject in the series to lead to a succeeding lesson. A 400 foot subject of approximately 15 minutes gives ample opportunity for the teacher's introduction of the subject to the class. frequent stops for questions by the pupils and at the end a follow-up which ties in with the other work of the unit. Films in 1200 and 1600 foot lengths are too long for class work and when shown are likely to become an entertainment feature rather than study material. Some teachers "show a series of 400 foot films, making a program of an hour or more but this is not an intelligent use of a learning technique.

There should be series of geographical films, each distinct in its content and bound together as units of the geography of the United States. These can be shown throughout a semester as the study develops for each unit, perhaps one or two each week.

The 400 foot film brings ample material for elementary and junior high school classes but in lower primary grades and the pre-primary there should be experiments with 100 foot length for simple subjects to be shown repeatedly to give full experience in recognition of fundamental geographical ideas and concepts.

The length of each film scene should be such as to give the pupil clear recognition of the objects and of the action. No studies have as yet revealed the type of material most suited to the short interest span of the second and third grade. The simple geographical objects presented in the film with the synchronized spoken words of a tested vocabulary would be fully as valuable as beginning books in geography. The use of high standard geographical material, in short film lengths for these repeat lessons would promote interest and ideas more readily than a picture book in geography for the

film has the power of centering the interest of the entire group and the screen material is large enough so that all of the group may see the desired object.

Film Content

The pictorial content of a geographical film is more than a series of scenes. The geography film should not be a continuity of landscape stills; rather a continuity of action scenes within a selected environment. This pictorial presentation must have a clear sequence of closely related scenes, with a continuity of action which has a distinct and moving center of interest. The motion picture lesson is laboratory material that creates ideas not otherwise obtainable by most pupils. *Irrigation* presents to fifth grade pupils plenty of material and experience relative to the needs of water on the land and the types of irrigation used to meet the different problems. *New England Fisherman* is a definite part of the fishing unit of man's work in New England. It is an indispensable tool for giving pupils real experiences and worthwhile ideas.

There should be few maps and diagrams. Those that are used must be animated to make clear relationships which cannot be shown in scenes. *Expansion of Germany* uses maps effectively. All maps are to be especially drawn to emphasize the ideas pictured. No photographing of dim detailed wall maps or hazy globes. Maps are used to present simple concepts of distribution, place, comparative size, distance, etc.

Geographical facts for observation in the classroom must be truthfully shown. This means that geographical scenes must be taken on location and not faked. Waikiki Beach is near Honolulu, not in a Hollywood studio. Geographical films are not synthetic deception made in Hollywood but a truthful presentation that is made on a location. *The Good Earth* is a synthetic subject giving ideas of rural China in which the destructive locusts are coffee grounds bouncing over a miniature hill and destroying six pounds of needle grass (wheat) mounted on a roller.

Wild animals should be filmed in their native environment as those of Martin Johnson or Robert Flaherty and not in the Hollywood wilds. The great value of geographical animal films is that the actual life is shown for laboratory observation of herds of elk, schools of fish, flocks of birds, swarms of insects, etc.

The clear accurate commentary by Lowell Thomas in *Colorado,* his home state makes it a pictorial presentation that provides good material for school geography of the United States. The central theme of each film must be man in an environment which may be physical or cultural. Such films bring pupils into close touch with the daily life of native people and their problems.

Pictures of the physical environment may be wonderful but if a man's activities are absent then the point of modern geography is missed. *The New South* is a broad subject that presents ideas of the United States in a manner for the fifth grade level. It binds together the physical environment and man's activities so as to be good laboratory material.

The alert teacher no longer conducts the geography lesson with strict adherence to the paragraph of the text. The basis of the lesson is carefully chosen pictures of

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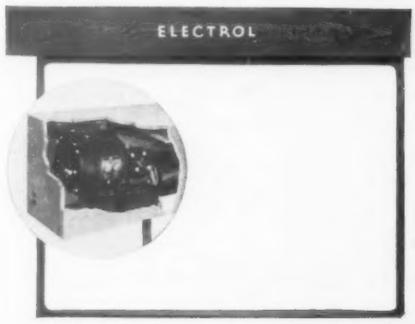

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the facts of work and living in a particular situation. What an opportunity for the geographical film to provide truthful laboratory material suggesting the various problems and observations of how people live! Such films are not made by just shooting scenes or putting together miscellaneous negatives but are as skillfully photographed as text books are written and printed.

To this writer the sound film is a tool that brings a remarkable laboratory method into elementary geography instruction. School geography has forsaken simple observation for too many generalized concepts that become memory exercises; it needs refreshing new tools. It is not visionary to predict for the near future a series of films for giving pupils basic experience in elementary geography.

Each scene presented must be of such length that its contents are clearly impressed on pupils' minds. The familiar is carried by a smooth transition to the new idea. In doing things, in manipulations and in all processes there should be a clear close-up observation and a correct sequence. Each film has its facts purposely arranged to give experience, to gain understanding and to create ideas or attitudes. The pictorial composition should always be simple; a few distinct objects in natural situations rather than stiffly posed or dressed up as in many Holland pictures, with wooden shoes and a flaring white bonnet which are worn only on special occasions.

Film editing is as important in geographical films as editing geographical texts. No excess scenes should be added to make a reel complete.

The Photographic Technique as an Aid to Learning

The photographic technique is closely interwoven with the ideas to be presented and there are certain technical qualities which should be maintained in all motion pictures.

(1) Sharpness and clearness is a basic quality of all scenes; no deep shadows. In geographical films there is a necessity for showing enough of the surroundings to fix the local of the picture. This requires ample footage so as to permit the pupil to grasp the situation of the geographical action. The film must not be marred by scratches, grain, or other imperfections so often present in "duped" films.

(2) Lighting must give clear outlines of the objects to be observed. Light and shade should balance in each scene throughout the entire film. The tone of light and shade should not change markedly from scene to scene. Fade-ins and outs should not be so prominent as to interfere with the smooth flow of thought.

(3) Accuracy and reliability in each scene is essential. Freak shots are out of place. Pictorial composition must build up observation and events to hold interest. Elementary pupils in geography require many close-ups as in *Live in the Sahara* where the camel is traveling on the desert sand. It shows his feet, knees, and nose in scenes of sufficient length for pupils to recognize his equipment for living in the desert. For the beginner there should be no extensive general landscape, footage devoted to sunsets, or rolling clouds, and weird effects; no rapid montage, which is confusing to the young pupil.

(4) Color is preferred in simple elementary films

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where this medium is required in presenting the concepts involved in close-ups of flowers, fruits, and animals. There are many technical difficulties connected with the use of color, especially in production. To name only one which will illustrate; due to the greater amount of light required in photographing scenes in color the lens aperture often has to be opened so wide that "critical" focus is difficult to secure except in extreme "close-ups." Often "medium close-ups" and "long shots" are out of focus or present a fuzzy scene without the depth to provide necessary orientation and perspective. Again the problem of expense must be considered for the color film is two to three times the cost of a black and white. While black and white is a cheaper medium, it is not always the most impressive. Research has indicated that color scenes stimulate the emotions but the black and white seem to permit more reasoning.

To stain different scenes in different colors is poor technique but when color film is used the pastel shades are more suitable than vivid reds, yellows, and blues which are unnatural.

(5) Animations are excellent aids when used to explain simple relationships. Such diagrammatic presentations must be free from jumps, and must be clear, simple, and correct. In *Snow White* there are whirling, falling and spiralling effects that are confusing to sensitive children.

(6) Each scene must be a definite photographic presentation to create ideas that build up the theme of the film to a definite purpose.

Sound

The radio is considered to be a powerful tool of information and a creator of ideas. It is restricted as to time and place. A sound picture in 16mm form has the power of a radio plus a definite picture in action. The sound picture is not limited as to time or place. It can be used and repeated many times and at many different places. It can be selected and adapted to different levels of learning and an important item is that it is always ready; the radio is not.

There is no question that the clearest understanding comes from direct contact with reality as in the field trip, but failing this, the film is a faithful substitute which without sound is not complete. In sound film there is an opportunity to give the pupil a complete experience with natives of a far distant land as well as the activities of his own country.

It is important to determine the sound most valuable to aid instruction in each unit. It is a practice coming from the theatrical film to fill in with music the spots where the commentator is silent. Heavy fanfare at the beginning of an educational film is distracting. Some of the following sound qualities of the film should be considered carefully by the instructor:

(1) Speech. Good speech is vital to a school film. The diction and clearness of a film make it valuable or useless in a schoolroom. The voice must be natural, not dramatic or affected but clear and distinct. A pleasing tone with warmth and interest is an esset to any film. The vocabulary must be checked with word lists and words must be so spaced as to give pupils a chance to absorb them and pauses to apply the ideas to the picture. The synchronization of the speech with the picture is of greatest importance. The dialogue must be clear, natural, and pointed. *Hop-picking in Kent* has a good dialogue between the native hop-pickers.

(2) Musical introduction is inappropriate in most instructional films. No musical undertone when words are being spoken. Music should be used at the appropriate time and place and never as a filler for the silent spaces.

(3) All sound effects should be true; ducks should be ducks, not good imitations. Such sounds as waterfalls, plows at work, passing trains, boats, etc. ,are excellent when used in proper relation to the scene.

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News and

Midwest Forum on Visual Teaching Aids

The second annual Midwestern Forum on Visual Teaching Aids will take place again at the Hotel Morrison in Chicago, April 5-6, 1940. After several meetings, the committee has prepared a splendid program, as follows:

Friday, April 5

10:00 A. M.—First General Session (Mural Room)

Purpose of the Second Forum
William C. Reavis, Chairman of Forum Committee

Where Are We Going in Visual Education?
J. E. Hansen, Chief, Bureau of Visual Instruction, University of Wisconsin.

10:30 A. M.—First Meeting of Classroom Clinics

Elementary School Clinic (Embassy Room)
Harry O. Gillet, Principal, University Elementary School, University of Chicago, Chairman; James P. Fitzwater, Lake View High School, Secretary.

How Living Things are Conserved and Protected—Nature film demonstration with fifth grade class, conducted by Miss Dorothy Burns, Cicero Public Schools.

High School-College Clinic (Roosevelt Room)
Noble J. Puffer, Supt. of Schools, Cook County, Chairman; Lee Cochran, University of Iowa, Secretary.

Film demonstration on Astronomy unit—Dr. Walter Bartky, University of Chicago.

12:00—Luncheon and Round Table for Directors of Visual Education—Monte Carlo Room ($1.00)

J. E. Hansen, Chairman; Samuel N. Stevens, Northwestern University, Secretary.

Topics for Discussion: The Budget and the Visual Program; Problems in Visual Instruction Confronting the Schools: Advantages and Disadvantages of University, County and Sectional Libraries of Visual Aids.

2:00 P. M.——Second Session of Clinics

Elementary School Clinic (Embassy Room)
The Preparation and Use of 2x2 Slides in Classroom Teaching—J. B. MacHarg, Eastman Kodak Company.

The Effective Use of Lantern Slides in Teaching Geography—Discussion leader, Ruth Weaver Mikesell, DePaul University; class demonstration by Laura Watkins, Cicero.

High School-College Clinic (Mural Room)
"Town Hall" Type of Meeting Built around a film—Dr. Irving J. Lee, Northwestern University.

Pageant of American Lantern Slides—demonstration arranged by Dr. John A. Bartky, President, Chicago Normal College; elementary class conducted by Martin Lowry.

6:30 P. M.—Annual Banquet—Terrace Casino

Recordings, still pictures, motion pictures, slides.

Saturday, April 6

9:30 A. M.—Final Session of Classroom Clinics

Elementary School Division (Embassy Room)
Demonstration of Films Prepared by United States Film Service—discussion of activities by Arch A. Mercey, Assistant Director.

High School-College Clinic (Mural Room)
Visual Aids in Industrial Arts Courses—W. R. Cleveland, Director of Visual Instruction, Downers Grove, Ill.

11:00 A.M.—Final General Session (Mural Room)

Dr. William C. Reavis, Presiding.

Demonstration by Commission on Human Relations of Progressive Education Association—James P. Mitchell, Member of Commission, and social science class of Elgin High School.

What Has Been Accomplished in the 1940 Forum

Reports from Classroom Clinics

Notes

Visual Sessions at Progressive's Meeting

The Annual National Conference of the Progressive Education Association, held in Chicago February 19-24, included a morning and afternoon session on Audio-Visual Aids in Education. J. E. Hansen, University of Wisconsin, acted as Chairman, ably assisted by a committee of Resource Leaders: Donald G. Cawelti, Winnetka Public Schools; Etta Schneider, Editor, Visualized Curriculum Series, New York City; Ella C. Clark, Winona, Minnesota, State Teachers College, Luella Hoskins, Chicago Radio Council; Clark Cell, Winnetka Public Schools.

The committee suggested problems for discussion by the group as a whole, evoking thereby reports of individual experiences in the use of visual aids. In discussing the question of specialization, introduced by Miss Schneider, Mr. Hansen stated "the time may come when the visual instruction specialist will become curriculum specialist as well" because of the complete knowledge he must have of the curriculum in order to get the films which will correlate closely with the topics studied. Another question raised was "how can large-group instruction by visual aids be reconciled, or applied to Progressive Education ideals and procedures, which stress individual instruction?" The problem of booking films in advance is concerned here. In answer, Mr. Cawelti described the working of the visual program in the Winnetka schools. There, many films are used for more than one purpose and for more than one grade or class; many creative activities result from film use; and many studies cover a period of time at any point of which the film may be appropriately used as background for a given project. Mr. Hansen brought up the desirability of short length films with a running time of approximately four minutes for units needing also slides or filmstrips for effective teaching. The question of the adequacy of present ready-made visual materials for use by progressive schools was discussed. The consensus of opinion seemed to be that commercially-produced materials unquestionably saved time, but that school-made materials — films, slides, photographs, etc. provide peculiar fitness to the local situation, and pupil-teacher activization, to a greater degree than the professional material. Another major topic of discussion was that on the use of "free" materials. The general opinion of the group was that the contents of film or other "free" visual material was a more important criterion than their cost. Exhibits of silk and cocoons are in no way compromised by the fact that they do not cost a rental fee. The distinction between this type of inanimate realia, and the highly-dynamic motion picture with all its possibilities for propaganda, was pointed out as well as the responsibility of the teacher for properly judging the suitability of the "free" materials offered. Portions of two afternoons were devoted to the showing of 16mm school-made films, primarily in the public relations area, including: *Living and Learning in a Rural School*, sound,

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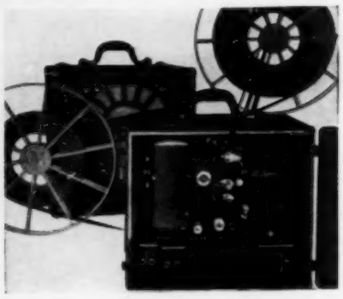

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produced by Teachers College of Columbia University; *School,* sound, showing progressive education at work, in the Hessian Hills School, Croton-on-Hudson, New York; *Education in California,* sound and color; *Design for Education,* sound, produced by Sarah Lawrence College, Bronxville, New York; *Dynamic Education,* silent, showing utilization of community resources by the schools of Santa Monica, California. The meeting also provided showings of three outstanding motion pictures on conservation of human and natural resources: *The City, The River* and *Housing in Our Time.*

A group meeting on *Motion Pictures as a Resource* was conducted by James P. Mitchell and included the showing of the Progressive Education Association's Human Relation Films, followed by discussion by high school students who have viewed the films.

Wisconsin Visual Conference

The Wisconsin Visual Instruction Conference took place at Madison February 9 and 10, sponsored by the Extension Division of the University. Dean Frank O. Holt, J. E. Hansen and F. D. Brown, all of the University staff, spoke at the Friday morning session. The afternoon was devoted to a joint meeting with the Radio and Visual Instruction Section of Southern Wisconsin Educational Association, at which Edgar Dale of Ohio State University was one of the speakers. Other features of the two-day program were the showing of new educational films Friday evening, two panel discussions on visual problems and the state program Saturday morning, followed by a luncheon meeting at which Joseph Rohr summarized the state visual program of the WPA, and Mr. Dale discussed "Where Are We Headed in Visual Instruction?"

New England Section Meets

The New England Section, Department of Visual Instruction of the N. E. A. held its annual business meeting recently at the Copley Square Hotel, Boston. Reports showed that the number of members had increased over two hundred percent in the last two years. In order to more effectively serve New England teachers, it was voted to organize branches in each of the six states.

The officers elected for 1940 are: President, Mr. Burdette Buckingham, Quincy, Mass.; Vice-Pres., Mr. Edward F. Wheeler, Bristol, Conn.; Sec.-Treas., Mr. Howard A. Smith, High School, Milton, Mass.

The Board of Directors for 1940 consists of Abraham Krasker, Chairman, Leland H. Chapman, Frederic J. Christiansen, Carleton W. H. Erickson, James A. Moyer, Paul Z. Rummel.

The Annual Conference on Visual Education, which is opened to all interested persons, will be held on Saturday, March 30, 1940 at the Boston University, School of Education, 84 Exeter Street, Boston.

Spring Quarter Visual Course

The University College of the University of Chicago announces a credit course entitled "Introduction to Visual Instruction" for the Spring Quarter commencing March 9. The class will meet Saturdays from 11:00 to 12:45 in order to make possible attendance by teachers and administrators who live considerable distance from downtown Chicago. The class has been set up for the Spring Quarter so that it can serve as an in-service laboratory or workshop course for teachers now on the job, and also afford students in special methods course or those engaged in practice teaching the opportunity of utilizing audio-visual aids in their own subjects. The course will be given by Mr. Wesley Greene, formerly an instructor in social sciences at the University of Chicago High School and Director of Activities at the International House, and now director of the College Film Center.

Non-Theatrical Association to Meet

To commemorate its first year of activity in its field, Allied Non-Theatrical Film Association members will gather in New York City on April 26 for their annual meeting and banquet. It is expected that several hundred film distributors, equipment manufacturers, laboratory men, visual education specialists, and others connected with the non-theatrical film field will attend. Leaders of the industry will discuss current problems affecting the field while officers will report on the activities of the organization during the past year. Election of officers for the ensuing year will also occupy a place on the program.

The Federal Film

Edited by Arch A. Mercey
Assistant Director, U. S. Film Service,
Washington, D. C.

Census Training Films

The motion picture as a training device will have its greatest test when the U. S. Census Bureau begins the 1940 census. Four one-reel motion pictures are being used in the training designed to expedite and simplify the work of the 130,000 field enumerators. The enumerators are located in every state in the union and in the U. S. Territories and possessions, and will begin work April 1, 1940. They are expected to complete their assignments in thirty days. The films will not be used outside continental United States.

Census experts have designed a comprehensive set of instructions which include manuals and detailed directions on each phase of the census work. For the first time the motion picture is being used for purposes of orienting the enumerators in their problems and illustrating, in a standardized fashion, the functions of certain broad areas of the census work. The films include:

1. A reel on orientation which is designed for exhibition to all enumerators. This reel will outline the growth and purposes of a Federal Census.
2. A reel on the census of agriculture.
3. A reel on the census of population.
4. A reel for the housing census.

The latter three films are "how to do" subjects, designed to standardize the methods of census taking. All reels will be shown to all enumerators.

These films are being made by the motion picture division of the U. S. Department of Agriculture in cooperation with the Census Bureau. Films will be sent out to district census offices for exhibition to the field workers. A detailed schedule of showings is being arranged in about 950 cities for the census workers in order that the films will be utilized intensively as part of the preparation and training before the national count actually begins. Census experts hope that through motion pictures they can demonstrate that visual means of instruction can play an extremely important part in a great national campaign such as that of taking a Federal census.

Of particular interest to students of the film is the production of a housing reel. The Census Bureau feels that the interest and importance of this general subject makes such inclusion particularly timely.

The Census films are for training the census field enumerators only and are not for distribution of any sort. *Please do not write requesting bookings.*

Health and Safety Films

The Office of Health Education of the U. S. Public Health Service has prepared a list of films on safety and health education for schools and adult education groups. This list is available to schools without cost from the United States Film Service.

Vocational Guidance
"HOW TO GET A JOB"

by Spencer D. Benbow, Ass't D'r Vocational Schools and Gardner L. Hart, D'r Visual Instruction Public Schools, Oakland, California.

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Each is 200 feet silent at $12.00; in color $30.00 —also for rent. Soon to be released are similar subjects on Norway and Denmark.

For preview prints and complete sale or rental catalogs, write Dept. E-7 today!

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BING CROSBY, Joan Blondell and Mischa Auer in "East Side of Heaven"

IRENE DUNNE and CHARLES BOYER in "When Tomorrow Comes"

DEANNA DURBIN in "That Certain Age"

Gilbert and Sullivan's "The Mikado" in glorious technicolor, with the D'Oyly Carte Players and London Symphony Orchestra

W. C. FIELDS, EDGAR BERGEN and CHARLIE McCARTHY in "You Can't Cheat an Honest Man"

VICTOR McLAGLEN and JACKIE COOPER in "Ex-Champ"

Doug. FAIRBANKS Jr. and Basil RATHBONE in "The Sun Never Sets"

"The Family Next Door" with Hugh Herbert and Joy Hodges

Don't miss these. Write to Universal's Non-Theatrical Department for further information regarding short-subjects, travelogues, animated cartoons and other feature length pictures.

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Separate film lists available on French, German, Historical, and Art subjects. In writing, specify in which you are interested.

School-Made Motion Pictures

(*Concluded from page* 100)

"Service clubs and organizations were glad to have the films shown."

"Board of education bought visual equipment mostly as a result of seeing school-made pictures."

"Disputes about the construction of new buildings were settled. (Made shots of various stages in construction of new building.)"

"Our community believes in boosting the schools probably due to their knowledge of the schools through pictures."

Chapter VIII

Conclusions and Interpretations*

Why does the school-made motion picture stand out as one of the best methods of gaining the public support and cooperation for the school? One reason is that the motion picture is almost always on the level of concrete experience and verbalism is practically non-existent. Of course, each individual interprets the pictures for himself, but the gap between individual interpretations is not nearly so great as it would be if just the spoken word or printed page had been used. However, this does not mean that the motion picture should not be supplemented by the printed or spoken word. For example, many school films attempt to show how children learn, but it is possible to show only the setting in which learning takes place. In such a situation the printed or spoken word is necessary to relate the physical activity or setting to the learning process.

Another reason the motion picture is such a powerful public relations medium is because of its ability to show many of the activities of the school within a relatively short space of time, and to a large number of people. If these people were to visit the school in an attempt to get the same information, it would require weeks of continuous attendance. The average parent or member of the public would be hard pressed to visit the school more than five or six times during the year. The motion picture then, with its ability to record significant parts of the school's activities in their proper relationship to the whole program, seems to be the most practical means of interpreting certain phases of the school for the public.

The school film may do the best single job of interpreting many phases of the school to the public, but it should not be depended upon to do it all. The school-made motion picture should be but a part of a balanced and continuous public relations program which uses every available method to interpret the school for the public.

*In the complete thesis, this Chapter VIII includes a detailed summary of all points previously covered, and a full Bibliography, both of which are omitted here.

Available Electrical Transcriptions

Radio Transcription Company of America, Ltd., Hollywood, California, offers several educational radio programs for school use, each series consisting of 39 programs.

"Frontier Fighters" is the title of a dramatic series presenting important historical events and outstanding characters in the development of the West. Historically correct, these dramas are enacted by a cast of outstanding artists. In "That Was the Year" news headlines of the past, important accomplishments of well known men and women, and the march of progress in science and arts are dramatized. The period covered is from 1896 to 1934. An added feature is the presentation on each program of the popular song success of the year represented.

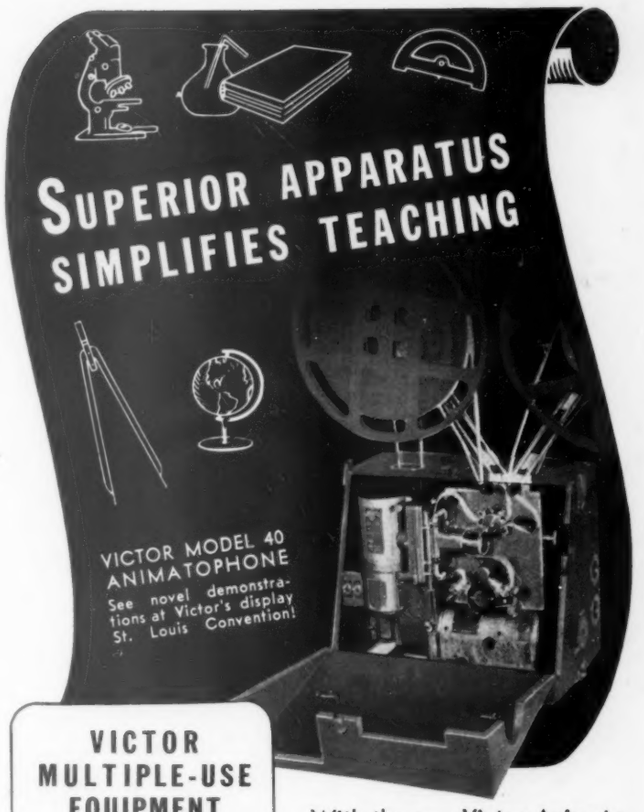
For music and music appreciation classes, two series are available. "The Story behind the Song" tells of the events surrounding the composition of favorite songs of our country, including many of Stephen Foster, as well as the old hymns and National Anthems of France, Great Britain and the former Austrian Empire. At the close of each drama the song is presented by a vocal ensemble accompanied by the organ. "Thrills from Great Operas" (in English) record the favorite scenes and arias from operas of the masters, each program presenting the dialogue of the opera leading up to the rendition of the aria. The orchestra of twenty men, selected from the Los Angeles Philharmonic Orchestra, is under the direction of Frederick Stark.

For classes in English literature, they have "The Lindsley Readings," dramatic presentations of the famous works of Dickens, Poe, Scott, O'Henry, Mark Twain, Riley and others. Mr. Lindsley also presents "Leather Stocking Tales." Classes in agriculture and gardening will find "Gardening the Luther Burbank Way" a valuable aid.

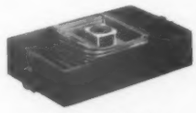
All material in these series have been carefully authenticated. Complete details regarding the programs may be obtained by writing to the Hollywood office of Radio Transcription Company, Hollywood Boulevard at Cosmo Street. Audition samples are available, at a nominal charge, for the purpose of selecting features which will fit in with the school curriculum.

▲ ▲

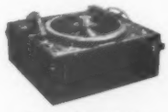
A series of 26 fifteen-minute recorded radio programs are available now for school use from the Institute of Oral and Visual Education, 101 Park Avenue, New York City. The title of the series is "Lest We Forget" and the programs "graphically dramatize the establishment and preservation of the four American absolutes—freedom of speech, freedom of press, freedom of religion, and freedom of assembly." There are two historical episodes on each record. Episode 1, "A Cameo of American Civilization," and episode 2, "The Virginia Colony," are on the first record, episodes 3 and 4, "The Massachusetts Bay Colony" and "Roger Williams and Rhode Island," on the second record, and so on up to "The World War and Its Results" and "The Post-War Period to the Election of Franklin D. Roosevelt" on Record 13.


SUPERIOR APPARATUS SIMPLIFIES TEACHING
VICTOR MODEL 40 ANIMATOPHONE
See novel demonstrations at Victor's display St. Louis Convention!

VICTOR MULTIPLE-USE EQUIPMENT
provides apparatus for many departments and uses


Integral Speaker

Amplifier


Recording Unit

Record Turntable

Microphone

Central Radio System

With the new Victor Animatophone Sound Motion Picture Projector, teaching reaches a new high in simplification and effectiveness. Victor's exclusive Multiple-Use features offer utility, flexibility and economy never before attained in Visual Education. Yet the cost is surprisingly low! Investigate this remarkable New Sound Projector NOW.

Check These Victor Advantages

Each projector is the basis for serving 30 or 3000 students with silent and sound movies, public address facilities, central radio, phono record reproduction and complete recording facilities.

★

New-type shutter and intermittent movement eliminates all "flicker."

★

Exclusive Victor Film Trip absolutely prevents mutilation of film.

★

Full, natural tone quality is assured by Victor sound equipment.

For Catalog No. 40, WRITE TODAY to—

VICTOR ANIMATOGRAPH CORP.
Dept. D-1, DAVENPORT, IOWA
Distributors throughout the World

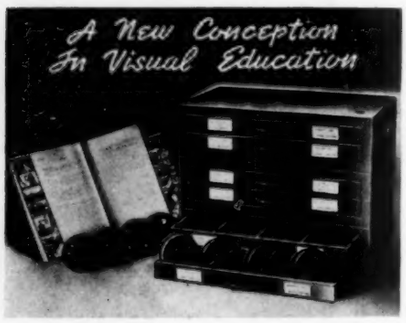
Current Film News

Geography Filmsets

A uniquely planned service of educational films on Geography has just been introduced on the market by Filmsets, Inc., New York City. "Filmsets" are complete libraries of short, silent motion picture films to be owned by individual schools, making it possible for such a school to have unrestricted access to the material whenever it becomes pertinent to the lesson. This is the basis of effectual use of study films.

This Geography Filmset consists of 48 units, and covers the more important aspects of the entire curriculum for geography in elementary and junior grades. Each unit is one-quarter of a reel (100 feet, 16mm), or approximately four minutes running time, and is devoted to one specific topic. Because of their brevity, they concentrate interest on essentials only, thus helping the teacher to keep the lesson within definite limits.

Every unit is complete within itself, so that units may be assembled in whatever order the teacher desires. For example, they may be used to approach the study of geography from the standpoint of



Showing teacher's handbook and film case

human needs, or regional relationships, or common environments, or historical developments. There is no over lapping of scenes in the various units. The industrial units are made, so far as possible, without any refence to locale, just as the regional units refer to products but do not expand upon them when such products are covered by units of their own.

A Handbook accompanies the units, three copies being furnished with the purchase of the complete Filmset of 48 units, thereby permitting the use of the Handbook by more than one teacher in the school at the same time. It is an elaborate teacher's manual, suggesting the proper technique for the use of the units, and containing fourteen illustrations from each covering the highlights of the film content. These pictures are a valuable feature of the manual as the teacher can prepare the lesson in advance from them. Titles of supporting units are appended to each unit.

For further information and purchase price, write to Filmsets, Inc., 52 Vanderbilt Avenue, New York City.

HARMON FOUNDATION INC., 140 Nassau Street, New York City, announce the release of two motion pictures showing life in the Congo, filmed in Africa during the past year and a half, under the auspices of the Africa Motion Picture Project, by Mr. and Mrs. Ray Garner:

Children of Africa—2 reels, 16mm silent—Planned especially for children from six to twelve years of age, with titles and editorial approach adapted to these age groups by two children's publication editors, Miss Pearl Rosser of the American Baptist Publishing Society and Miss Nina Millen of the Missionary Education Movement. This film is also made to meet the requirements of the school curriculum study of Congo peoples. The subject matter is concerned with the work, play, and home life of the African child. Each reel is a distinct unit and may be used alone.

A Day in an African Village—2 1-reel units, 16mm silent—Suitable for study in the later grades. Typical activities and routine matters of village life from sunrise to sunset are depicted, covering work, recreation, methods of preparing food, building homes, etc.

The Africa Motion Picture Project was sponsored by the Foreign Mission Boards of ten Protestant Churches, the Phelps Stokes Fund, the American Mission to Lepers, and the Harmon Foundation. The expedition was unique in that all filming was done to meet definite subject requirements. The completion of these two subjects makes a total of five of the Project's films which are complete. The first three to be done were "Ngono and Her People," "The Story of Bamba," and "Song After Sorrow," all of which show mission activities against the background of African culture. Five more are yet to be edited. All of these films are being distributed through the Division of Visual Experiment of the Harmon Foundation.

GARRISON FILM DISTRIBUTORS, INC., 1600 Broadway, New York City, have just released:

Men and Dust—2 reels, 16mm and 35mm sound—A factual film dealing with the silicosis and tuberculosis stricken Tri-State lead-and-zinc mining area (at the juncture of Kansas, Missouri and Oklahoma), based on a study by the Tri-State Survey Committee, Inc. The picture was filmed by Sheldon Dick, former photographer for the Federal Security Bureau and commentary was directed by Lee Dick, producer and director of "School," the film on progressive education made for the American Film Center. J. V. D. Bucher, editor, also worked on "The City."

ARTHUR C. PILLSBURY, 640 Arlington Avenue, Berkeley, California, well-known lecturer, is offering his educational films on plant life in natural color and sound. Four one-reel pictures are now ready, as follows:

Story of Pollen—A picture of the pollen of the Spider Lily, Hybrobrising, and lapse-time pictures of the Hibiscus.

The Flowers of Your Garden—Includes a microscopic picture of the Tradiscantia, and lapse-time of common flowers.

California Wild Flowers — Presents the wonderful Snow Plant, having 32 spikes.

Flowers of Hawaii—Rare and wonderful flowers, including the Silver Sword, and lapse-time of the Night Blooming Cerus.

These four subjects make a 1600-foot feature reel. Another such reel will be ready soon, also a lecture set of 2400 feet.

AUDIO FILM LIBRARIES, 661 Bloomfield Avenue, Bloomfield, New Jersey, have added to their collection of films on timely subjects:

Finland Fights—1 reel, 16mm sound, available for rental. This movie document shows all of the outstanding incidents that have gripped the world: evacuation of civilians, Russian air attack on Helsinki, massing of Finnish defense, Finns destroying homes to hamper enemy, fighting on the Mannerheim Line, Reds landing troops by parachutes. Finnish ski troops in action, capture of Russian supplies and prisoners, dramatic scenes of Finland's heroes defending their homeland against overwhelming odds.

BAILEY FILM SERVICE, 1651 Cosmo Street, Hollywood, California, offer three vital new films among their "Educational Films of Merit:"

Finland and **Sweden**—each ½ reel, silent—Two timely subjects produced under the direction of Dr. William G. Campbell, Professor of Education, the University of Southern California; and edited by Miss Mary Clint Irion, formerly Assistant Director of Visual Education, Los Angeles County Schools, now Educational Advisor for Bailey Film Service. Intimate scenes of cities, farms, people, and activities of these Scandinavian countries are presented. Produced only this last year the films are up to the minute in subject matter. Available for sale or rent in black-and-white or color.

China—1 reel, silent—Produced by Dr. Herman H. Chrisman, formerly of Stanford University, and edited by Miss Irion. Not only are general views of China shown, but many close-ups of people at their daily work, types of dress, and the contrast between the old and the new. For sale or rent in 1 reel black-and-white, or ½ reel color.

Also included in the latest Bailey releases are two prize-winning British

(*Continued on page* 133)

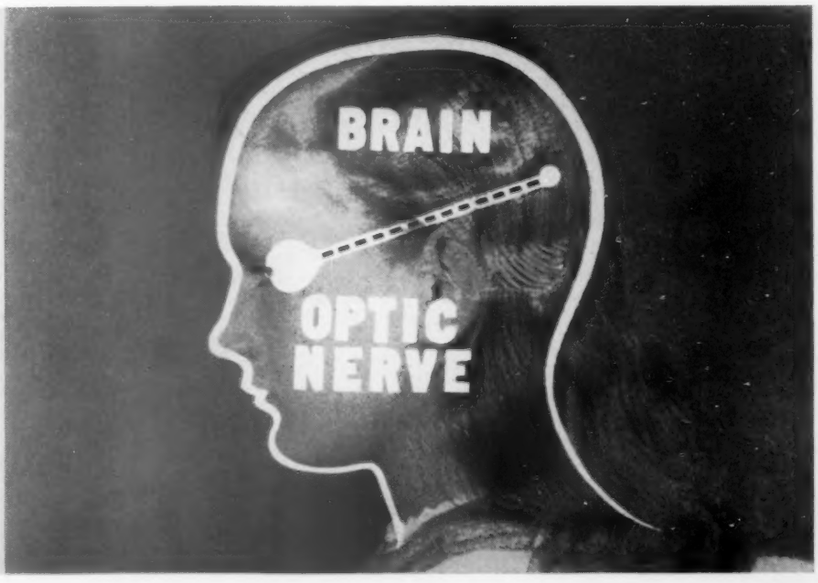
FOOD SERIES—VITAMIN B_1—The natural sources of vitamin B_1, the antineuritic vitamin. The effect of deficiency of vitamin B_1 on pigeons and young rats. The effect of extreme vitamin B_1 deficiency on human beings—beriberi. Effect of a balanced diet on the disease, and the need for a balanced diet to maintain healthy bodies. 1 reel, 16 millimeter—$24.

Important additions to the Eastman Classroom Films *on HEALTH*

THE first of the new films is devoted to the antineuritic vitamin, B_1, and its role in the maintenance of health...the second, to the mechanics of seeing and the conservation of eyesight, presented in terms so simple as to be easily grasped by students in the elementary grades. Both reels have been carefully prepared, and are fully authoritative.

Eastman Classroom Films on the general subject of Health also include one or more reels on each of the following: Bacteria... Modern Basketball Fundamentals ...The Blood...Body Framework ...Breathing...The Living Cell... Child Care... Circulation... Circulatory Control...Cleanliness... Digestion... Diphtheria... The Feet... First Aid... Food and Growth...Modern Football Fundamentals...Good Foods...Home Nursing... The House Fly... Mold and Yeast...Muscles...Posture... Safety Series (Safety at Home, Safety at Play, Vacation Safety)...Sewage Disposal...Skin ...Teeth...Tuberculosis and How It May Be Avoided. Write Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

THE EYES (PRIMARY)—A film intended for use in the elementary grades. Compares the eye with a camera—shows the action of the iris; focusing; the pathway of light impulses to the brain. Proper care of the eye; correct lighting for classroom work; the proper use of glasses; removal of dirt or other particles from the eyes. 1 reel, 16 millimeter—$24.



Among the Producers Where the commercial firms announce new products and developments of interest to the field.

New Picture Series for Classrooms

A collection of 700 carefully selected documentary still pictures illustrating many of the persistent modern problems involved in "Living Together in the Modern World" has been placed on the market by the Creative Educational Society, Mankato, Minnesota. Each picture is 8½" x 11" in size, and is printed by the Optak process on a durable mount. The text material and questions on the back of each picture have been directed

The seven teacher's manuals

to children of elementary school age, ranging in suitability from primary through upper elementary grades.

The materials of VISUALIZED CURRICULUM SERIES, as the picture collection is called, have been organized to meet the needs of modern schools with ample opportunity for adjustment to local needs.

Classified picture file

The pictures have been arranged in logical sequence around the theme of the respective problems. For example: the *Transportation* pictures are filed under the sub-headings: early land transportation, journey by train, water transportation, air transportation, journey by plane, local transportation, and transportation for fun. *Human Resources*, another of the problems in the series, includes health, safety, cultural heritage, government, education, and recreation. An alphabetical index, however, permits the use of the pictures in any other sequence dictated by local needs.

Seven teachers' guides to accompany each of the seven large problems (*Food, Shelter, Clothing, Transportation, Communication, Conservation of Human Resources,* and *Conservation of Natural Resources*) have been prepared in collaboration with outstanding authorities in elementary education. These guides represent a great advance in professional guidance for teachers.

The Managing Editor for VISUALIZED CURRICULUM SERIES is Etta Schneider, formerly on the staff of Teachers College, Columbia University, and an officer in the Department of Visual Instruction of the N.E.A.

Film Slides on the Art of the World

Through recent developments in the field of color photography it is now possible for schools to procure light, durable, colored film slides for art appreciation classes which are not only faithful in color to the original work but priced within the reach of all. This material is offered by Art Education, Inc., 35 W. 45th St., New York City. They can furnish a wide selection of slides from their own large collection of copyrighted subjects extending from the Cro-Magnon Period to the Moderns with Matisse leading.

Complete classified lists of available subjects have been prepared by this firm so that the teacher can select those best suited to her needs without the necessity of following any prescribed course in art appreciation. Or the Service Bureau will suggest subjects in sculpture, architecture and painting of any period of art history required. This service is not limited to the fine arts alone, but examples of historic design in crafts such as fragments of Coptic and Peruvian textiles, Athenian pottery and Indian baskets are available in color slides.

For Social Science classes there is a series of 108 slides in black and white entitled "Little Journeys in Eastern States" with an accompanying manual for teachers by John T. Faris. Half-tone illustrations of this series are to be had for notebook work. There is also a set of 117 half-tone prints with a chart and manual for the teacher entitled "The American Renaissance" picturing the genesis and development of art in America from 1607 to 1814. Each successive Colonial period is treated in turn with illustrations of its characteristic architecture and furniture. The whole presents a graphic story of life in Colonial Days based upon authentic material. Film slides are available for all subjects in this series.

An added advantage to the use of Masterpiece Color Film slides is the individual color miniatures and 8x10" color prints as well as individual art instructor's texts which are available for many of the subjects listed. Progressive schools are sending the work of gifted graduating students to Art Education, Inc., to be made into color film slides in order that a permanent record can be kept of their work.

Mechanical Movements on Film Slides

Visual Sciences, Suffern, New York, announces the first roll in a new film slide series for shop teachers. This series also supplements the required work in general science and physics, and will be found especially valuable in automotive and aeronautical schools.

Consisting of 37 key diagrams, "Mechanical Movements" clearly illustrates the principles involved in transmitting various types of motion—such as rotary to rectilinear and reciprocating to rotary—and in changing direction through the use of wheels, pulleys, gears and shafts. The use of eccentric, rachet, escapement, universal joint, differential and car gear shift, so difficult to draw on the blackboard or otherwise present, are here depicted with great clarity and effectiveness.

This roll, costing less than six cents per frame, may be used thousands of times, rendering the original cost very nominal. Educators may order on approval for twenty days without obligation.

RCA Victor Book of Audio-Visual Aids

The 1940 edition of "Audio-Visual Service for Schools," a widely-read presentation of sound products and services developed especially for educational use, has been announced by Ellsworth C. Dent, Director of the RCA Victor Educational Department. Presenting radio and related equipment of a wide variety, the booklet may be obtained without cost from Mr. Dent's office at Camden, New Jersey.

Equipment designed to aid in classroom instruction and extra curricular activities, as well as general administrative problems, is illustrated and described. Emphasis is placed on practical applications, rather than on lengthy technical descriptions of the equipment. New radio and Victrola instruments, instan-

taneous recorders, sound amplification systems, two complete sound systems providing radio and Victrola reproduction, and a new 16mm. sound motion picture projector are shown.

A brief history of RCA Victor's 30 year background in bringing schools the benefits of recorded aids to instruction, is presented.

"Mighty Midget" Photoflash Bulb

Development of the world's smallest practical photoflash lamp, called the "mighty midget" because of its man-size flash, and designed for use with all cameras except focal-plane shutter types, was announced recently by General Electric's lamp department at Nela Park, Cleveland, Ohio, on the occasion of the tenth anniversary of the photoflash lamp's debut in America. So small is this little flash bulb that more than two dozen of them can be carried in the pocket of a suit coat, more than three dozen in an overcoat pocket, or in a lady's handbag. Besides being the world's smallest flash bulb, the "mighty midget" is also claimed to be a much more efficient producer of light for photoflash photography. A wide range of pictures taken by its powerful flash proved to be as sharp and clear as shots of the same subjects taken with much larger flash lamps.

Bulb compared to walnut and golf ball.

Unlike all other flash bulbs which are equipped with the conventional type of screw base, the "mighty midget" No. 5 employs the bayonet-type base, like the base of many a lamp used in automobile service. It is designed for rapid-fire loading and unloading in reflector equipments. Owing to its compactness, the lamp lends itself to use in smaller lens cumbersome reflector equipments and in spot-type projectors for long-range night-picture "takes" outdoors as well as for spot lighting effects indoors. The midget flash bulb fits into the trend in photography toward miniature cameras, films of postage stamp size, and smaller equipments.

Current Film News

(*Concluded from page* 130)

documentary films by H. A. Burnford:

Harvest of the Forest—1 reel, silent—shows logging operations, conversion of logs into lumber, uses of lumber; emphasizes the importance of men in the creation of the material we use every day.

Cement — 1 reel silent — Employs close-ups to emphasize important steps in the making of cement.

Dr. David Bennett Hill, First National Bank Bldg., Salem, Oregon, has produced three new 1-reel health films in silent and sound, making a set of five films covering the field of child health and character building from pre-natal care through high school. The new ones are:

Before the Baby Comes — Stresses food, exercise, care of the body, medical and dental attention, etc., for the mother.

Baby's First Year — Continues the series, to the baby's first birthday. Mother's care, baby's regular schedule, food, habits, and medical attention are treated.

Growing Up—Shows the activities of the normal child from one to six, emphasizing habit training, proper play and equipment for developing mind and body, nursery school, food, physical examinations.

These films are sold and rented by the Bell & Howell Company, 1815 Larchmont Avenue, Chicago.

Bell & Howell Co., 1801 Larchmont Avenue, Chicago, have added many new subjects to their silent rental library, as shown in their new 24-page silent film catalog. A number of them are Bray films, carefully selected for their technical quality and educational applicability, and the latest Castle productions. Other additions are:

Pottery Making—2 reels—Produced by the Art Department of the University of California, under Mr. Boyd Rakestraw's supervision. This film, employing modern technique in cinematography, shows in close-up the important steps in making pottery by the cast method.

Marsh Birds You Should Know—1 reel—Uncommon scientific close-ups of common northern marsh birds: bitterns, gallinules, black-birds, coots, herons, terns and other species.

Seeing the Universe—2 reels—A popular astronomy treatment and condensed version of Ruroy Sibley's illustrated lecture. First the astronomer's "tools" are considered, then the Sun, Moon, Planets, and the stars and galaxies of outer space.

Nation Builders — 2 reels — Grand Prize winner in the documentary class, American Cinematographer contest 1938. Gives an authentic presentation of Australian historical development, showing that settlement of "new" countries parallels our own early history.

The King and the Scullery Maid—2 reels—A whimsical fairy tale of interest to youngsters; includes an example of puppet technique.

Erpi Classroom Films, Inc., 35-11 35th Avenue, Long Island City, New York, have prepared a group of new 16mm sound films for intermediate and higher grade levels on modern agriculture in its various phases. These include:

The Truck Farmer—Shows in detail crop planting, irrigating, spraying, harvesting, packing and shipping.

The Corn Farmer—An insight into life in the great corn belt.

Science and Agriculture—Traces the soy bean from its cultivation in China through its culture and use in the United States.

Irrigation Farming—Illustrates man's ingenuity in using the forces of nature to improve his environment.

The Orange Grower—A story of the living and working conditions of peoples engaged in citrus growing, showing how crops are planted, nurtured, harvested and transported.

International Film Bureau, 59 E. Van Buren St., Chicago, announces the release in 16mm of the following German language film:

Concert in Tyrol, a sequel to **The Orphan Boy of Vienna.** Both pictures feature the Vienna Choir Boys. The Bureau also announces the availability of a short classroom version of **Emil und die Detektive,** a film based on the text published by Henry Holt and Company. In addition to its list of films in German, the International Film Bureau offers free lists of documentary films and French features.

Walter O. Gutlohn, Inc., 35 W. 45th Street, New York City, distributors of 16mm sound and silent film, announce the publication of the 9th edition of their catalog of entertainment films. This edition is by far the largest of the Gutlohn catalogs and contains a wealth of detailed information in its 112 pages, profusely illustrated with over 70 pictures. A copy may be had without cost upon request to Gutlohn.

Eastman Kodak Stores, Inc., Kodascope Libraries Division, 356 Madison Avenue, New York City, have issued a new sound film rental catalog, 8th edition, 24 pages. A distinguishing new feature of the book is the classifying of certain films—cartoons, comedies, features, featurettes, westerns—to show which are suitable for children of various ages, and which are for adult audiences. Other subject classifications are: music, musical classics, sports, adventure, history, travel and miscellaneous. Most of the subjects offered for rental can be purchased. Additional information will be furnished upon request.

The Film Estimates

Being the Combined Judgments of a National Committee on Current Theatrical Films

(A) Discriminating Adults (Y) Youth (C) Children

Date of mailing on weekly service is shown on each film.

All Women Have Secrets (Virginia Dale, Joseph Allen) (Para) Thoroughly mediocre and absurd little drama about struggles of student scientist and student wife married on slight income. False, shallow imitation of college and marital life. Plot feeble, acting poor. Utterly valueless production. 2-27-40
(A) & (Y) Stupid (C) No

Balalaika (Eddy, Ilona Massey) (MGM) Lavish musical comedy melodrama. Masquerading prince falls in love with lovely communist. Action in court, countryside, opera house, war, cabarets. Lightsome mixture of overwhelming ingredients but fine cast, sprightly humor, and ideal musical-comedy heroine. 2-13-40
(A) & (Y) Entertaining (C) If not too exciting

Beware Spooks (Joe E. Brown, Mary Carlisle) (Colum) Futile attempt at mystery-detective farce. Hero cop, fired from force for bungling, chases criminal through crazy obstacles, slapstick spook-house, to grim killing. Brown's usual antics and labored comedy so unfunny as to be pitiful. 2-20-40
(A) Stupid (Y) & (C) No

Black Friday (Karloff, Lugosi) (Universal) Another pseudo-scientific horror thriller told in flash-back. Surgeon's operation to save friend by brain-graft results in dual personality, now a confused professor, now a ruthless killer. Hokum personality changes. Pretentious, but ridiculous stuff. 3-5-40
(A) Depends on taste (Y) No value (C) No

Blondie on a Budget (Singleton, Lake) (Columbia) Efforts of Blondie and spouse to squeeze fur coat and fishing-club fee out of budget complicated by "another woman," adding a note of mild sophistication to the usual comico-silly antics. Fifth in Blondie series. 3-5-40
(A) Hardly (Y) & (C) Mostly amusing

Castle on the Hudson (Garfield, Sheridan, O'Brien) (Warner) Another prison drama with no new angles. Arrogant, tough, rebellious little gangster imprisoned for crime. Later permitted leave by warden on his honor to see dying girl. Usual gang killings and prison breaks. Decidedly unedifying. 3-5-40
(A) Depends on taste (Y) Valueless (C) No

Charlie Chan in City in Darkness (Toler, Lynn Bari) (Fox) European war situation with Paris in blackout is setting for very inferior Chan mystery. Story is loose-jointed, crazily complex and largely incoherent, leaving audience still baffled at end. Sound and fury from Harold Huber far less funny than intended. 2-13-40
(A) & (Y) Poor (C) No

Cisco Kid and the Lady, The (Romero, Weaver) (Fox) Fairly amusing "good old western" adventures of outlaw, cross between Don Juan and Robin Hood. He tricks partner, makes love to his gal, is caught, escapes and dodges law. Gay, fast-moving, entirely fictional, with ethics badly jumbled. 2-20-40
(A) Depends on taste (Y) Doubtful (C) No

City of Chance (Lynn Bari, C. Aubrey Smith, Donald Woods) (Fox) Hectic melodrama. Girl reporter goes to gambling resort for story, falls in love with owner, cleans up at tables, turns over resort to D. A., and departs with money and owner. More or less trashy excitement. 2-27-40
(A) Mediocre (Y) Objectionable (C) No

Fatal Hour, The (Karloff, Grant Withers) (Monogram) Murder mystery drama. Karloff good as Mr. Wong, oriental detective who solves murders and gem smugglings aided by hard-boiled, bulldozing offensive police captain, and ubiquitous girl reporter. Plot weak, action thin, suspense poorly sustained. 2-20-40
(A) Mediocre (Y) Valueless (C) No

Geronimo (Foster, Ralph Morgan) (Para) U. S. forces under cold, rigid General, attempt to quell famous Apache Geronimo who, aided by contemptible politician, is ravaging the west. Indian thriller in new dress. Brutal tortures, killings, inconsistencies, impossibilities, horror and tension. Valueless "history." 2-20-40
(A) Harrowing (Y) & (C) No

Grapes of Wrath (Fonda, Darwell, Carradine) (Fox) Powerful novel masterfully filmed. Staunch sharecropper family driven from land, lured to California by promises of work, find only unemployment, exploitation by labor racketeers, violence, injustice, starvation. Vivid social document. Splendidly acted, photographed. 3-5-40
(A) **Somber and superb** (Y) Mature (C) No

He Married His Wife (Nancy Kelly, McCrea) (Fox) Nauseating, senseless, humorless marital comedy in excessively bad taste. Horse-racemad ex-husband tries to marry off divorced wife to save himself alimony. Situation absurd, dialogue daffy, acting forced, characters overdrawn. 3-5-40
(A) Stupid (Y) No (C) No

His Girl Friday (Russell, Grant, Bellamy) (Columbia) "Front Page" hilariously screened. Editor tries by fair means or foul to keep his ex-wife star reporter from marrying again. "Hot story" and crooked politics figure strongly. Riotous, fast-moving action. Snappy, witty dialogue. Clever, complex situations. Diverting. 2-20-40
(A) **Entertaining** (Y) Very exciting (C) No

Honeymoon Deferred (Lowe, Lindsay) (Universal) Usual sophisticated murder-mystery. Man-about-town insurance investigator and his few-hours bride get involved in murders and solve mystery despite police. Usual husband-wife cheerful but blase' banter. More or less entertaining. 2-27-40
(A) Depends on taste (Y) Passable (C) No

Honeymoon's Over, The (Stuart Erwin, Marjorie Weaver) (Fox) Familiar theme of young couple trying to keep up with the Joneses. Parasitic friends, irresistible salesman and their own lack of common sense plunge elemental hero and his wife into debt and out of job — with artificial happy ending!
(A) Hardly (Y) Perhaps (C) No

House of Seven Gables, The (Lindsay, Vincent Price) (Univ.) Famous Hawthorne novel exquisitely filmed. Avaricious son of old New England family, to get estate has brother convicted of father's murder. Melodramatic plot well done by fine cast, Lindsay outstanding. Fine dramatic and artistic unity. Superb photography. 3-5-40
(A) & (Y) **Excellent** (C) Mature

Ireland's Border Line (Irish cast) (Wm. Alexander) Farce comedy. Two identical bags, one with stolen jewels and one belonging to cough medicine salesman, cause complications. Acting, continuity, photography frequently amateurish but vivid, human and amusing throughout. Good humored rivalry between North & South. 2-13-40
(A) Depends on taste (Y) Perhaps (C) No

Joe and Ethel Turp Call on the President (Sothern, Gargan, Stone) (Metro) Filming of Damon Runyon tale, symbolic, saccharine, tiresome. Joe and Ethel, cloddish caricatures of "supposed" average Americans, visit President to defend their mailman whose sentimental story is told in flash-back form. 2-27-40
(A) & (Y) Doubtful value (C) No

Light That Failed, The (Colman, Huston, Lupino) Kipling's famous sombre novel notably filmed. Arrogant young artist, wounded at bloody Sudan, wins money and fame before his sight goes. Hazy in continuity, plot and character relationships, but excellent cast, fine photography and settings. Ida Lupino superb. 2-13-40
(A) **Fine of kind** (Y) & (C) No

Little Old New York (Faye, MacMurray, Greene) (Fox) Old New York waterfront as spectacular background for frankly glamorized, melodramatic tale of Fulton's struggle to build steamboat. Emphasis on romance, costumes, settings. Elementary but pleasing humor supplied by feminine tavern keeper and beau. 2-13-40
(A) & (Y) Entertaining (C) Possibly

Marines Fly High (Dix, Morris, Lucille Ball) (RKO) Former plantation supervisor of heroine's ranch, leader of revolutionaries and bandits, sets trap for Marines stationed to protect country population. Dix and Morris as hard-boiled Marines provide trite rivalry and horseplay. Thoroughly mediocre and rich in absurdities. 2-20-40
(A) Poor (Y) & (C) No

Married and in Love (Alan Marshall, Barbara Read, Helen Vinson) (RKO) Unpretentious, quite convincing little tale. Happily-married hero, aided to success by loyal devotion of fine little wife, nearly succumbs to lure of a former love. Situation cleverly averted by wife who makes husband realize his real love is for her. 3-5-40
(A) Fairly good (Y) Mature (C) No

My Son is Guilty (Cabot, Jacqueline Wells) (Columbia) Ordinary, morbid, utterly valueless crime film. Worthless ex-convict son exploits policeman-father's confidence, gets police radio job and aids criminals. Finally father, representing law and justice, traps and kills son. Acting mediocre. 2-13-40
(A) Poor (Y) & (C) No

Nick Carter, Master Detective (Walter Pidgeon, Rita Johnson) (MGM) Another sabotage film, with hero Nick Carter and his comic ubiquitous follower as detectives, working on mysterious disappearance of important airplane plans. Usual thrill stuff. Airplane crashes, battle between airplane and cruiser and Hollywood tricks. 2-13-40
(A) Depends on taste (Y) No value (C) No

Night of Nights, The (O'Brien, Olympe Bradna) (Para) Trite plot slightly redeemed by convincing acting, good direction, and effective photography. Successful playwright and actor goes on rocks after wife's disappearance. Coming of daughter 20 years later reawakens him. Some pleasant moments. 3-5-40
(A) & (Y) Fair (C) No

Northwest Passage (Tracy, Young) (Metro) Part of famous novel, powerfully filmed. Rogers' Rangers' epic thrust through wilderness, evading enemies, pushing north to destroy ruthless Indian tribe, and finally home again. Grim, blood-curdling warfare and gruesome scenes in ranks. Tracy fine as dauntless Rogers. 2-27-40
(A) **Fine of kind** (Y) Very strong (C) No

Rasputin (Harry Baur) (French-Eng. titles) Fine interpretation of Rasputin, the lusty peasant prophet and healer who came to influence Royal family after curing invalid heir. Church nobles and army plot against him and finally kill him. Somber, dramatic, engrossing. 2-13-40
(A) Good of kind (Y) & (C) No

Reno (Dix, Gail Patrick, Anita Louise) (RKO) Mediocre yarn of small dramatic worth offered as history. Reno lawyer, when silver-mining died out, started the easy divorce game, got caught himself, turns gambler, saves own daughter from divorce-court-action and is freed himself, etc., etc. 2-20-40
(A) Feeble (Y) & (C) No

Shop Around the Corner, The (Sullivan, Stewart) (Metro) Absorbing, human, delightful drama, in quiet dialogue of intertwined fates of blustering Budapest shopowner, his trusted first clerk corresponding with unknown girl, kind, timid father of family, ingratiating clerk, pert, naive salesgirl. Outstanding character portrayals. 2-27-40
(A) & (Y) **Excellent** (C) If it interests

Swiss Family Robinson (Thomas Mitchell, Edna Best) (RKO) Famous novel of family shipwrecked on remote, uninhabited island. Creative homemaking, despite obstacles, guided and inspired by father. But conflict between happy father and sorrowful mother adds a heavy note. Good acting by capable cast. 2-27-40
(A) & (Y) **Interesting** (C) Unless too mature

Vigil in the Night (Lombard, Aherne) (RKO) Somber, absorbing drama. English nurse sacrifices position for inefficient sister who finally atones. Heroine's courageous devotion helps bring much-needed hospital. Expert, finely pictorial photography. Fine background music. Excellent acting by cast. Lombard outstanding. 2-20-40
(A) **Fine of kind** (Y) Too somber (C) No

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